

OVERSEAS NEWS

French nuclear reactor leaks raise fresh fears

BY PAUL BETTS IN PARIS

A CONTROVERSY over the safety of nuclear power plants risks being revived again in France after two accidents in key nuclear facilities exactly a year after the Chernobyl disaster in the Soviet Union.

Production of uranium hexafluoride at the Pierrelatte nuclear facility south of Lyon, was halted yesterday after a leak was discovered at a plant.

Seven technicians were hurt while repairing the leak which caused what the authorities described as "a weak quantity" of uranium hexafluoride (UF-6) to escape into the atmosphere.

The accident followed another leak in France's Superphénix fast breeder nuclear reactor at Creys-Malville, discovered on March 31, but which has yet to be repaired. Technicians at Creys-Malville have still to discover the precise cause of the leak of liquid sodium.

Although the French nuclear authorities and the electricity utility, Electricité de France (EdF), claimed that the two accidents were under control and would not entail any major risks, the two incidents immediately sparked concern from French environmental lobbies.

Mr Alain Carrignon, Environment Minister, asked the group in charge of the uranium hexa-

fluoride operations at Pierrelatte to give the "utmost information" on the leak and its possible consequences.

The ministry is to prescribe additional safety measures to ensure against another such accident.

Uranium hexafluoride is only marginally radioactive, but is a highly toxic substance. It is produced at Pierrelatte, then transferred to the nearby uranium enrichment plant of EDF.

There, it is enriched and turned into the nuclear fuel used in pressurised water reactor plants, which form the basis of the French nuclear power system.

Production of uranium hexafluoride is expected to be interrupted for several days following the accident yesterday, but this is not likely to affect Eurodif, which has ample stocks to continue operating for several weeks.

At the Superphénix plant, the nuclear reactor has continued to operate despite the leak of more than 20 tonnes of liquid sodium, which is not radioactive but highly dangerous as it ignites automatically in air.

Protest pressure groups have asked that the reactor be shut down until the causes of the leak have been identified.

Gatt staff to stage pay protest strike

BY WILLIAM DULLFORCE IN GENEVA

STAFF at the General Agreement on Tariffs and Trade, the world trade organisation, are staging a half-day strike today, to protest against sharp declines in their salaries and pensions.

The stoppage by the near-250-member secretariat will delay until tomorrow a meeting of the Group on Negotiations on Goods, a committee body due to check progress in the Uruguay Round of trade liberalising talks.

Further action will be taken, the staff council has warned, if Gatt's 98 member-countries do not act to ease the fall in

staff's purchasing power and to return salaries to "a reasonable level."

Purchasing power among Gatt's professional staff, mostly economists and lawyers, has fallen by more than 20 per cent since the 1970s, a much deeper cut than that suffered by UN personnel in New York.

Gatt staff are paid in Swiss francs but with rates and foreign posting adjustments tied to the dollar rates applied in New York. At the heart of the present dispute is the UN budget crisis and depreciation of the dollar.

Gorbachev cuts short controversial Czech visit

BY LESLIE COLETTI IN PRAGUE

MR MIKHAIL GORBACHEV, the Soviet leader, ended an official visit to Czechoslovakia whose conservative leadership took a dim view of his appeals at home for a democratisation of political and social life.

Mr Gorbachev left the Slovaks capital of Bratislava on Saturday, earlier than planned, because of what Soviet officials said was a continued cold. He and Mr Gustav Husak, the Czechoslovak leader, expressed "satisfaction" with the results of the visit which was said to have strengthened "co-operation and friendship" between the two countries.

Throughout the visit Mr Gorbachev avoided giving the impression he was putting pressure on the 76-year-old Mr Husak, but statements issued after talks between the two communist parties spoke of a "frank" exchange of views which normally denotes sharp differences.

In his major address in Prague the Soviet leader said Moscow was "far from calling on anyone to copy us" but he said the Soviet party was "deeply convinced" that success within Czechoslovakia was not possible without each party having "obligatory respect" for the interests of its allies.

"A reliable criterion of the seriousness of a ruling Communist party today," he said, was its attitude towards the "experience of friends." Such comments were undoubtedly aimed at the critics of Czechoslovak leadership according to East European officials.

As was the case in Prague, thousands of residents of Bratislava came to welcome Mr Gorbachev of their own free will. Young people in particular hoped the visit would bring about political changes in Czechoslovakia which was occupied by Soviet troops in August, 1968, when Mr Alexander Dubcek, the reformist Communist leader, was deposed.

In informal chats with Czechoslovak citizens he met along his cavalcade route, Mr Gorbachev referred several times to the brief "Prague Spring" of 1968.

Gorbachev and ruling-party officials have said prospects for agreement over constitutional reforms had dimmed since Kim and Kim Young-sam, the other leading dissident, decided to form a new political party

Chinese public security minister dismissed

BY ROBERT THOMSON IN PEKING

CHINA'S Public Security Minister, Ruan Chongwu, who worked to humanise the country's tough police force, has been removed in a ministerial reshuffle. His fall highlights the continuing infighting in the Communist Party and reflects the party's push for tighter control over the country in the wake of last year's student protests.

The Health Minister, Cui Yueli, and the Light Industry Minister, Yang Bo, were also replaced during the closing session of the National People's Congress on Saturday. But both are in their late sixties and their portfolios are not as

politically sensitive as Mr Ruan's. Elderly Chinese officials, including the paramount leader, Deng Xiaoping, were angered by the soft-touch police handling of the student protests last December and urged that more force be used.

Ruan could also have irritated those leaders with his unusual public admissions of police corruption and brutality. Ruan, who had previously served as a vice-mayor in Shanghai, was a close associate of the dumped party general secretary, Hu Yaobang. He had attempted to make the police force more publicly accountable.

Significantly, Hu did not appear at Saturday's closing session, although his appearance at earlier sittings was hailed by Government officials as a sign of political stability and unity and was given prominent coverage on Chinese television.

The congress chairman, Peng Zhen, an elderly official with growing importance, indicated last week that Hu could lose his position on the elite Politburo Standing Committee this year.

The successor to Ruan, who is to work for a science organisation, is Wang Fang, a political and legal enforcer noted for his role as prosecu-

tor during the trial of Mao Tse-tung's wife, Jiang Qing, in 1975.

The congress closing session also provided an unusual show of opposition to officially sponsored proposals. The most significant dissent, about 50 votes out of 2,700, was in a proposal by Premier Zhao Ziyang for a new head of the state commission for economic restructuring.

Zhao, who now heads the commission, proposed that Li Tieying, a former electronics industry minister, take the role to alleviate the added burden he inherited on becoming acting party general secretary in place of Hu.



Ruan Chongwu: "The soft touch on students"

S Africa clampdown gives rise to outcry

BY ANTHONY ROBINSON IN JOHANNESBURG

SOUTH AFRICAN religious and opposition groups have reacted strongly against further civil rights restrictions promulgated over the weekend. These forbid any form of protest against detention without trial or calls for the release of such prisoners.

The new restrictions were published in Saturday's official gazette.

The regulations, which even ban the display of car stickers or slogans on T-shirts, make it illegal to make any oral or written statement or attend any protest gathering. The media are forbidden to publish any reports emanating from meetings, including church services.

Hours after the new regulations were promulgated, Archbishop Desmond Tutu, Archbishop of Cape Town, announced he would defy the new rules by holding a church service at St George's Cathedral today, to pray for the release of detainees.

Six weeks ago, Mr Adrián Vlok, Minister for Law and Order, said 2,000 people were detained under the internal security laws.

The Unofficial Detainees Defence Committee (DDC) estimates that more than 30,000 people have been detained since the state of emergency was reimposed on June 12, of whom over 7,000 are still in detention.

Mr Murphy Morris, acting president of the anti-apartheid United Democratic Front (UDF), said the new regulations "are calculated to frustrate a proposed campaign for the release of all detainees."

Mrs Helen Suzman, of the opposition Progressive Federal

Party (PFP), said she would defy the new restrictions. She was backed up by Mr Colin Eglin, PFP leader, who added: "No regulation is going to change the PFP's attitude which is that the detention without trial must be scrapped."

The latest government clampdown follows last week's warning by President P. W. Botha of possible South African raids against neighbouring states to forestall an alleged African National Congress (ANC) plot to disrupt the whites-only election campaign.

Last night an emergency meeting of the council of Jewish servicemen, representing the 60,000 Jews living in the occupied territories, demanded tougher penalties against stone-throwing and petrol-bomb throwers, including the death penalty.

S. Korea 'to delay reform'

SOUTH KOREA has abandoned plans for constitutional reform until after a successor to President Chun Doo Hwan is installed on the eve of the 1988 Olympic games, an out-of-the-way local newspaper said yesterday. Reuters reports from Seoul.

A successor to Chun, who will step down when his term ends next February, will be selected by the electoral college system, said the influential Chosun Ilbo and the Government's Seoul Shinmin. They both quoted government sources.

Meanwhile, hundreds of police continued to confine opposition figure Kim Dae-jung, in strict-fool of the electoral college system, to his residence.

Government and ruling-party officials have said prospects for agreement over constitutional reforms had dimmed since Kim and Kim Young-sam, the other leading dissident, decided to

form a new political party

JAPANESE VOTERS went to the polls yesterday in local government elections which are expected to have a crucial impact on the future of Mr Nakasone, the Prime Minister.

But the issue caused a backlash of protest from retailers, consumers, small businesses and all of Japan's opposition parties which see the sales-tax as a punishment, not a progressive step toward tax reform.

Political analysts believe a poor showing for the LDP could result in calls for Mr Nakasone's resignation from his own party.

At stake are 13 gubernatorial posts and 2,670 local assembly seats in 44 prefectures, two mayoral posts and 665 city assembly seats.

The proposed sales tax has turned into a nightmare for Mr Nakasone, who was hoping that the LDP's tax reform package

would be one of the crowning achievements of his time as Prime Minister, allowing him to extend his term beyond its expiry this autumn or retire in glory as an LDP king-maker.

There was no immediate comment from Harare.

A high-powered team of ministers and military men visited Moscow recently to discuss arms. Western diplomats here have long been predicting a Zimbabwe/Soviet arms deal.

Zimbabwe insists it does not provide a military base for African National Congress (ANC) fighters. Only last week Mr Witness Mangwende, Foreign Minister, described as nonsense and lies allegations that ANC guerrillas were being allowed to use Zimbabwe in order to disrupt next month's whites-only elections.

Medicine should be more than the ability to treat or cure.

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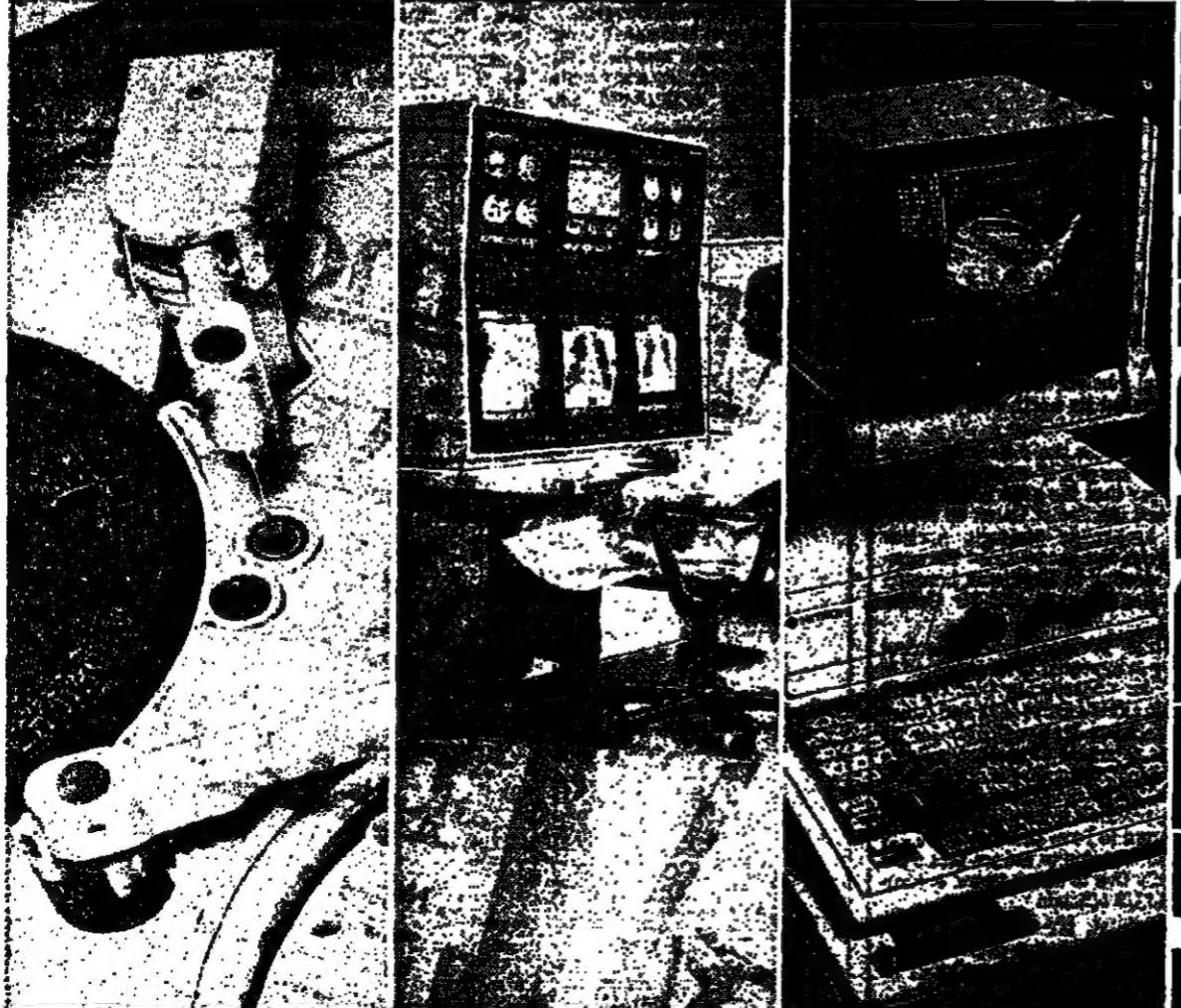
Medical electronics have brought

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OVERSEAS NEWS

Brazil and bank creditors far apart on debt

By ALEXANDER NICOLL

BRAZIL and its leading bank creditors remained far apart at a meeting in New York over the weekend.

Mr Francisco Grael, the central bank governor, made a further informal request for co-operation by the international banking community, but the banks' advisory committee, headed by Citibank, refrained from endorsing it.

Facing a notional deadline this week for the repayment of \$2.6bn (£8.5bn) of debt principal due in 1988, Mr Grael did not ask banks for a formal rollover of the maturities. Instead, he is simply asking banks "not to request payment".

This approach partly reflects Brazil's outstanding request for an informal 60-day standstill on \$150m of short-term interbank and trade credit lines. The banks' commitment to maintain these expired on March 31.

Though the advisory committee on Friday repeated that it was ready to continue a dialogue with Brazil, it will not make a recommendation that banks accede to Brazil's latest request.

It had given a similar frosty response when Brazil sought the standstill on short-term

Swedish rail faces 'crisis'

By Kevin Done, Nordic Correspondent in Stockholm

THE SWEDISH railway system is in "deep economic crisis" and is facing rapidly mounting losses over the next four years, according to the Swedish Railway Network (SJ) board. Mr Bengt Farbeck, SJ director-general, is to resign at the end of the year.

The SJ board is proposing a radical reorganisation of the railways under which the state would take full responsibility for maintaining the country's 11,000-km railway network.

SJ would be reorganised along commercial business lines as a rail-based transport company, and would pay the state a fee for use of the railway network.

Pope in 'dirty war' plea

By TIM COOKE in BUENOS AIRES

THE POPE, in the closing stages of his seven-day tour of Argentina, appealed for "no return to the kidnappings and disappearances."

It was his most direct reference to the trauma of the mid-1970s, when more than 9,000 people disappeared at the hands of paramilitary death squads organised by the military regime.

The Pope's remarks on Saturday night, to a gathering of more than 100,000 young people, came at an important moment for the Government

which is investigating the "dirty war" through a series of human rights trials in which more than 300 military personnel stand accused of organising the repression.

Right-wing groups have mounted a series of bomb attacks in recent weeks as the trials enter a critical stage. One bomb exploded close to the presidential palace last week, and the Pope made his remarks on the disappearances and within a few hundred yards of the route which the Pope had to take to arrive at the youth gathering.

Boeing and JAL to stand trial in US

By William Hall in New York

BOEING and Japan Airlines went ahead with their trial in the US to determine their liability for the deaths of 280 people in the 1985 crash of a Japan Airlines Boeing 747 jumbo jet according to a ruling by a state court judge in Seattle, Washington.

The ruling could pose a serious setback for Boeing, the world's biggest aircraft manufacturer, which has one of the best safety records.

After the crash, Boeing and Japan Airlines said there was no need to hold a trial because the two companies would compensate the families of the victims through private settlements.

More recently, as litigation has looked more likely, Boeing and Japan Airlines have been trying to have the court case heard in Japan.

However, the state court judge in Seattle ruled yesterday that the basis of liability and damages should be considered separately for the moment and ruled that the question of liability for the accident should be settled in a US court. He deferred a decision on whether damages should be tried in the US or Japan.

Boeing and Japan Airlines had sought a dismissal of a lawsuit brought by 28 families in King County superior court in Seattle. The companies argued that the US courts were not a proper forum for the case because the accident happened in Japan, most of the victims were Japanese, the plane was Japanese-owned and it was inconvenient to handle the case in the US.

Mr James Baker, a Seattle attorney representing some of the families' victims, had opposed efforts to get the court cases transferred to Japan because Boeing is based in Seattle.

He has argued that Boeing wanted the cases to be heard in Japan because it was concerned that the legal discovery process required by the US courts would be harmful to the company.

The state court ruled yesterday that "both countries have an interest in Boeing designing, building and repairing planes properly. The question of liability should be answered before this court."

Danish bond tax proposed

By Hilary Barnes in Copenhagen

DENMARK'S Social Democratic Party will impose a turnover tax on bonds, tighten capital gains tax on shares and corporate income tax, and raise employer social security contributions if returned to power following this year's Folketing (Parliament) election.

The party's plans are designed to raise about Dkr 5bn (£7.5m), to be used to increase unemployment benefits (slightly reduced) by the present non-Socialist Government, raise pensions, and inject more money into research and development.

The bond turnover tax will be at a rate of 0.02 per cent, but the first-time sale will be exempted. The party says the tax will raise Dkr 3m.

Philip Stephens on behind-the-scenes pessimism over the latest currency accord

Bravado of G7 hides private fears on dollar

THE financial markets' sceptical reaction to last week's Washington currency accord should have come as no surprise to the finance ministers and central bankers of the group of seven industrial nations.

Beneath the official protestations that myopic currency traders were underestimating the strength of the agreement, there were serious doubts among the participants themselves about the extent to which they could hold the line.

With economic growth in the main industrial nations slowing and the trade imbalances between the US and Japan and West Germany almost as large as ever, a sense of paralysis appeared to creep into the talks.

"Everyone knows what they ought to be doing but no one is doing it," one key official was reported as saying. Another thought even that was too confident a statement.

In public, ministers sought to play down the significance of the 2.5 per cent appreciation in the yen's value against the dollar with which foreign exchange traders who have been making hefty profits selling the dollar against the yen could turn their attention to the D-mark.

In private, some officials were sensing that the joint commitment to seek to stabilise the dollar first made in Paris in February was a much looser arrangement than it had first appeared.

Others were suggesting that as long as the US attitude to a further depreciation of the dollar remained equivocal.

The public bravado hid real concerns that the combination of weaker growth and turbulent financial markets could be enough to tip the world economy into recession. That was accompanied by an acknowledgement that the decision to single out Japan for special



James Baker: trade deficit warning



Karl Otto Pöhl: in line with Voelcker



Nigel Lawson: call for interest rate emphasis

to finance the country's current account deficit.

And the less confidence that international investors have in the policies of a debtor country, the higher the price the debtor will have to pay.

The best hope is that such intervention might provide a breathing space during which governments might convince the markets that prospects were improving. "What we badly need is a market perception that the problems in the world economy are being tackled," one senior Japanese official commented.

The problem, he added, was that the markets are too impatient and unwilling to provide the stability needed for governments to translate commitments into actions.

Mr Nigel Lawson, Britain's Chancellor, also implicitly acknowledged the limitations on central bank intervention and suggested that efforts to stabilise exchange rates would be buttressed by giving greater emphasis to interest rate policy.

In essence the alternative to higher US borrowing costs rates would be lower rates in Japan and West Germany.

But while both the Bonn and Tokyo governments have acknowledged that there is some scope for a further reduction in their market rates, they believe that it is relatively small.

Much more important, most officials believe, is the need to provide the markets with concrete evidence that the US administration is able to bring down its budget deficit and that the Japanese Government will meet its growth pledges.

That in turn will need a breakthrough in the political conflicts paralysing both the US Congress and the Japanese Diet. In the meantime, though central banks may make occasional successful raids, the markets seem set to rule.

criticism may have been a tactical mistake.

The risk is that such open discord less than two months after the so-called Louvre agreement will undermine the credibility of the whole arrangement. Foreign exchange traders who have been making hefty profits selling the dollar against the yen could turn their attention to the D-mark.

There are now an uncanny similarity between Mr Voelcker's speeches and those of Mr Karl Otto Pöhl, the president of West Germany's Bundesbank.

Mr Pöhl neatly summarised the dangers of a "crash landing" in a public lecture in Washington. The threat was of a vicious circle of depreciation, inflation and further depreciation.

In the process the world economy could be driven into recession, protectionism would gain a firmer grip and the debt crisis would be severely aggravated.

Against that there still appears to be a feeling in the US Administration that the dollar will have to depreciate further if the trade deficit is to be corrected.

The International Monetary Fund's latest Economic Outlook underlined the inadequate response so far of US exports to improved competitiveness.

Mr James Baker, the US Treasury Secretary, meanwhile was at pains to point out that the trade deficit will fall by only around \$15bn this year.

The IMF's analysis of prospective savings and investment flows also points to the apparent inevitability of a further dollar decline—at least in the medium term.

Those doubts explain the qualified language of the Group of Seven's communiqué. "Around current levels" exchange rates are "broadly consistent" with economic fundamentals, it says.

And even then it makes clear that the judgment depends on everyone living up to their economic policy commitments.

In such circumstances central bankers are far from confident that they can reverse the dollar's downward trend.

Mr Pöhl reminded the US that intervention could become a permanent instrument

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OVERSEAS NEWS

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TENSION GROWS IN TRADE DISPUTE

EEC in move to prevent Japanese dumping

BY WILLIAM DAWKINS IN BRUSSELS

THE EUROPEAN Commission is drawing up measures to prevent Japanese goods being dumped in the EEC as a result of the US decision to impose punitive tariffs on a range of Japanese exports.

This follows a meeting of trade officials from the community's 12 member states which agreed on tough joint action to force Japan to open its markets to foreign companies and to retaliate against unfair pricing in the community.

The move marks a significant

increase in tension in the long-running series of trade disputes between Brussels and Tokyo already exacerbated by last week's announcement of another big rise in Japan's trade surplus.

It is also a victory for Mrs Margaret Thatcher, the British Prime Minister, who has been seeking EEC support in her threatened retaliation for the Tokyo Government's refusal to grant the UK company, Cable and Wireless, a significant stake in Japan's telecommunications market.

The move marks a significant

agreement last Friday to "look into all possible further action by the community" to force Japan to lift market barriers to foreign companies, "including the more effective implementation of anti-dumping measures."

In a joint communiqué they demanded an inquiry into the growing imbalance in trade between the EEC and Japan. This would be in the context of regulations under the General Agreement on Tariffs and Trade specifying how parties to the agreement can seek compensation for losses of trade advantage.

Falling adequate market-opening measures by Japan within a short time, the statement said, the Commission would make a proposal to member states to limit certain tariff rates.

This would give the EEC more freedom to change tariff structures to whatever levels it saw fit, giving the community more liberty within Gatt rules, to conduct a tariff war against Japan.

The Commission will examine how to stop Japan winning fur-

ther trade advantages through the lower industrial tariffs, a side effect of Spain and Portugal's entry to the community.

The trade officials' declaration is a tougher and more specific version of the statement on Japanese trade relations made by EEC foreign ministers last month.

Foreign ministers will discuss the issue again when they meet in two weeks, but trade officials said the Commission was unlikely to have drawn up precise proposals for action against Tokyo until May.



Margaret Thatcher: EEC action is seen as a victory for her

US semiconductor market shows signs of recovery

BY LOUISE KHOC IN SAN FRANCISCO

BY CARLA RAPOORT IN TOKYO

Other chip makers report significant increases in orders from distributors. Part of this increase may be related to cuts in Japanese memory chip production and export. Concern about potential shortages of Japanese memory chips has led to panic buying in the US, according to Texas Instruments, the major US maker of memory chips.

National Semiconductor said it sees a moderate increase, rather than a boom. "The boom is not here yet," said the company. "We prefer this moderate increase in sales which allows us to manage our growth best."

But, distributors report they have seen a genuine surge in orders. The major semiconductor distributor in Northern California increased shipments to US customers against Japanese competitors and seeking government funding for a major manufacturing co-operative designed to boost the industry's international competitiveness.

If the industry enters a new boom, its arguments for government support and trade sanctions would be significantly diminished, US analysts said.

For National Semiconductor, the agreement also represents a significant boost for the company's high-performance microprocessors.

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OVERSEAS NEWS

Soviet and Italian banks agree industrial venture

By ALAN FRIEDMAN IN MILAN

TWO SOVIET state banks and two of Italy's biggest banks have agreed a 50-50 joint venture to provide corporate finance for industrial and trade ventures.

The agreement, designed to provide financial services, including the taking of equity participations in joint Soviet-Italian companies, was to be signed today in Venice at a conference on East-West trade.

The two key banks involved are Gosbank, the Soviet central bank, and Banca Commerciale Italiana (BCI), Italy's second largest banking group. Also involved are Vnesheconbank, the Soviet foreign trade bank, and Mociocredit, the Rome-based medium-term credit institute heavily involved in export finance.

BCI said in Milan that the venture was "a concrete example of what Mr Gorbachev's new policies are all about". It would "go well beyond mere trade deals and will be designed to create industrial

SHIPPING REPORT

Shortage of new business in tanker market

By KEVIN BROWN, TRANSPORT CORRESPONDENT

THE DRY cargo market retained a firm tone last week, in spite of a lower profile on the part of Soviet charterers, but there was a general shortage of new business in the tanker market.

Denholm Coates, the London brokers, said the Soviet chartering programme for grain imports appeared to have slowed, but rates had held steady for cargoes of grain from the US Gulf to Japan.

Panamax vessels, the largest able to transmit the Panama Canal, were said to have been fixed at \$17 per ton for this trip. The US/Continent rate was around \$8.50, but a cargo of 55,000 deadweight tonnes was

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MANAGEMENT

WHEN THE directors of Osaka Oxygen (OSK) decided a year ago to implement a large-scale redundancy programme, Kameo Suzuki, the chairman, apologised to his fellow directors and to his employees for having managed the company so poorly that such a shameful move had become necessary.

Suzuki's explanation was typical of Japanese corporate behaviour in such a situation. Company directors in Japan take responsibility for their employees' lives almost in the same way they take responsibility for their own families. The explanation was also true. OSK is a case that provides rare insights into some of the weaknesses of Japanese industrial management, including overmanaging, poor financial control and ponderous decision-making processes.

Until now, Western analysis of Japanese management practices has concentrated on the successful big internationally oriented companies, such as Toyota, Honda, Matsushita and Komatsu. These companies became that way by competing every day with the best US and European manufacturers, have had to shed many traditional Japanese practices and have developed some exciting new ones, such as "just-in-time" assembly and quality circles, in the process.

But that international level, as OSK shows, management in Japan can be as dreary and unimaginative as anywhere else.

The problem for would-be analysts of these companies is getting access to them. In OSK's case, it has become possible because BOC, the British multinational industrial gases group, bought a controlling stake in the company in 1982.

OSK, a medium-sized company with sales of about ¥60bn (£163m), is ranked a weak third in Japan's industrial gases industry. Nippon Sanso, the industry leader, has a 40 per cent market share, Teisan, controlled by France's L'Air Liquide, has about 15 per cent, while OSK and Daido, in which Air Products of the US has a 25 per cent stake, each have about 10 per cent.

So far, this sector profile is similar to that in most Western countries, showing a high concentration among a few multi-national and local players. But there are two important differences in Japan. First, there are another 25 or so competitors with minuscule shares. Second, the industry is technologically backward.

A measure of sophistication in the industrial gases sector is shown by the relationship between oxygen and nitrogen sales. Oxygen is associated with steel and other mature, heavy

BOC and Osaka Oxygen

Giving the breath of life

Ian Rodger explains the UK industrial gases group's strategy in Japan

The OSK plant at Amagasaki: BOC took time to explain the rationalisation and implement redundancies

industries, while nitrogen is used in more advanced industrial processes. In the US and Western Europe, nitrogen sales tend to be about three times those of oxygen. In Japan, the ratio is about one to one.

OSK's position within the industry was even weaker than its share would indicate. For one thing, it can only just be called a national company. All its plants and about half of its industrial gas sales are made in the Kinki region between Osaka and Nagoya. Also, the company makes only 40 per cent of the gas it sells, buying the rest from competitors.

When BOC arrived, OSK had just lost the chance to redress that situation a bit. A competitor was quicker to seize an opportunity to build a new separation plant in a developing area in western Japan. Moreover, OSK was excessively dependent on two industries, steel and semiconductors, and its sales of oxygen and nitrogen, respectively, and it was significantly overstaffed compared with other companies in the sector.

Not the ideal vehicle, then, for a foreign company entering Japan. But the fact that OSK was stagnating was probably one reason why the controlling Suzuki family was willing to consider favourably the injections of capital and technology that BOC could provide. The others are rare in Japan, and the company is a Japanese company by a foreign company was almost unprecedented.

BOC invested £50m in OSK convertible debentures, giving it 42.5 per cent of the Japanese company's shares and the right of first refusal on any Suzuki family share sales up to 50 per cent. However, BOC was given effective control, with the right "to be consulted" on any investment over \$1m.

The emphasis in the early days of the relationship was on appearances and demonstrations of mutual respect. OSK quickly adopted English, for example. Simultaneous translation into English was provided for board meetings.

But beneath the surface, not much happened. Suzuki carried on as president until 1984 and



BOC plants elsewhere.

The group concluded early last year that OSK should move speedily to develop new markets while rationalising existing operations, especially the gas equipment manufacturing divisions. Manpower would be reduced from 1,000 to just under 800 people.

Even a simple change can take months to gain sufficient approval to reach board level. And when it does, no director would dare change it.

BOC's way around this system was to create a task force on market development. It picked some promising young people from the sales force and set them up as a separate department to develop new customers, supplying them with new technologies brought from the UK and the US.

"For two years, the traditional salesmen did not believe we could develop new customers," Tamura says. But now that some big names, like Toyota and Hitachi, are being signed up, they are realising that this is a worthwhile policy to pursue.

Another problem was setting up a strategic planning function. It was obvious to BOC that OSK had to become more productive, both through investments in more efficient plant and manpower reductions. It also had to examine its position in the industry and set targets for development.

A task force was again set up, using five bright, young people from within the company. Established in 1983, the group spent a year under the direction of a BOC planner from London. It studied the Japanese market and visited

similar companies like market development and cost control, and OSK managers simply would not understand.

Their experience told them that the industrial gases industry was a service industry. You waited until the steelworks made an order and then you arranged for a subcontractor to take care of distribution. (Distribution is a vital part of a gases business, but OSK did not manage it at all, a situation that has since been rectified.)

The idea of going to say, a market development manager and trying to convince him to use nitrogen instead of propane for his heat treatment process was alien to them.

Similarly, the idea that success depended on cost competitiveness had never occurred to them.

BOC tried to impose a market development function, but inevitably ran into the formidable ring system. Under this system, common to most Japanese companies, proposals for changes in policy or work practices must originate on the shop floor or in the department concerned. They must then be discussed within the department. Only when every member of the department has indicated agreement by placing his stamp (ringi) on a proposal document can it rise to the next level where the process is repeated.

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a company. First, compulsory redundancy is out of the question. Second, it was not enough for OSK to offer generous severance payments and early retirement terms. It also had to undertake to find other jobs for the redundant workers.

The company has some 10 subsidiaries that supply various services, such as installing pipework for vessels and servicing equipment on customers' premises. It was able to place many mechanical trades people plus some management staff in these subsidiaries. Other redundant managers and skilled staff were placed with dealers, partly in an attempt to improve the distribution network.

In these transfers, employees took salary cuts of anything from 20 per cent to 40 per cent, but this was acceptable, especially as they also received a lump sum payment of £2.5 to 3 years' salary plus an annual salary for OSK middle managers.

Tamura says about 80 people have been transferred to subsidiaries, another 60 to dealers and other outside companies and 40 have taken early retirement, all with scarcely a whimper.

"Most people really understand the OSK situation," he says. In retrospect, the rationalisation has proved to be even more timely than expected. Because of the rapid increase in the yen, the steel and other big customised industries have suffered, causing a severe recession in the gases industry.

Tamura says OSK shipments in the last six months are 16 per cent lower than in the same period of 1985-86, and he expects further declines. However, OSK profits are starting to recover, while those of its competitors are still sliding.

Despite its progress, OSK still has a long way to go. Its oxygen-nitrogen ratio, for example, has swung from 2:1 to 1:1.5, but that is more because of the decline of oxygen sales than the effect of its promotion of other products. The struggle is on.

Thus, last May OSK announced that it would invest ¥10bn (£23m) in a new separation plant that would be the most efficient in the industry. It also moved the head office out of a satanic old building and into a modern office block.

The Japanese approach to redundancy is significantly different from that of US or European companies, again reflecting the familial nature of

Strategic perspectives: the crucial factor in decision making

BY CHRISTOPHER LORENZ

IN A BID to cut costs, an American maker of printed circuit boards experimented with a new type of production process. When its engineering team had finally debugged the process, it sold management the idea that the new technology would actually increase unit costs, by as much as 30 per cent.

In operational terms, the new process was obviously unattractive. But strategically, it gave the company a chance to make a major breakthrough. For it could produce not only the existing range of products, but also denser boards of better quality that could be sold at high margins in a specialty market.

Manufacturing decisions that might be downright stupid in operational terms alone may look very different when seen from a strategic perspective, argues Elizabeth Haas, a principal of McKinsey & Co, the management consultancy.

Most manufacturing decisions, says Haas, are still taken in an operational framework defined by a company's internal performance standards — machine downtime, scrap rate, work-in-progress, inventories, and so on. But the real test of manufacturing decisions is their strategic impact on the company's performance in the dog-eat-dog world of global competition. Success only comes when Western Electric set up a full-time, high-level team to oversee the installation, and get about changing people's habits and assumptions.

What Western had failed to do was understand the interrelationships between eight key areas of manufacturing which Haas identifies: product design; process design; information and control systems; human resources; research and development; suppliers' roles and relationships; and organisation.

Properly linked decisions in these areas can create a commanding strategic advantage, Haas concludes. But for those misguided companies which continue to seek salvation in operational improvements, the long-term outlook is bleak.

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April 1987

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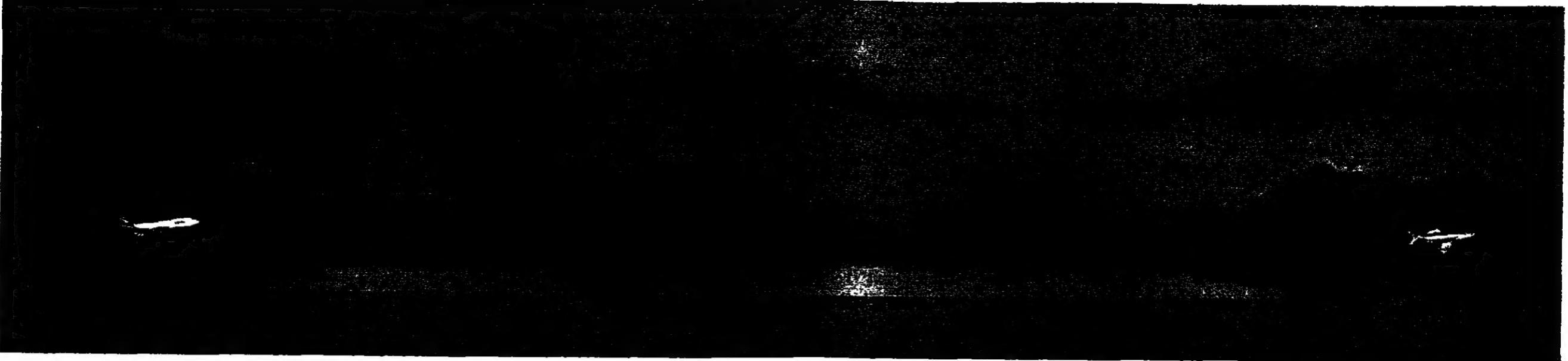
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FINANCIAL TIMES BUSINESS INFORMATION

CHRISTOPHER
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WHEN LORENZ



IT'S SILLY TO DRINK YOURSELF STUPID. AT 35,000 FT, IT'S CRAZY.

Two alcoholic drinks in the sky have at least the same effect as three at sea-level. (Ask any stewardess.)

Because the atmospheric pressure in an aeroplane is lower than it is on the ground the alcohol gets into the bloodstream faster, and the higher you are the higher you get. (Even in a modern jet, the cabin pressure at 35,000 feet is the same as the outside pressure at about 7,000 feet.)

Alcohol also affects the body's ability to use oxygen efficiently. (So does smoking). And since there's less oxygen floating around in an aircraft cabin, if you get a hangover it's really going to hang around.

So while a few drinks might make you feel all's well in the world, when you get down to earth you won't feel like getting down to business.

EAT, DRINK AND BE MERRY

Even when everything's free, you can end up paying for it later. Studies have shown that in the air most people drink more than they do on the ground: and it's a bit of a vicious circle.

A long flight can get a bit boring, however comfortable it is. The drinks are free and you don't have to move an inch to get one. What's more, just being on a plane makes you thirsty. The humidity in an aircraft is as low as 2% whereas most of us are used to a level of around 30%.

Alcohol is not the solution. You need to drink much more than usual, but more water or fruit juice. And if you need a 'drink' to relax, have a glass or two with your meal and drink lots of water or juice in between – and any trips to the loo give you a chance to stretch your limbs.

(Qantas do serve free drinks, of course. And since we do, we think you ought to be offered the best. In fact, Business Traveller Magazine just voted our wines the best in the sky.)

Be careful what you eat, too. People eat on a long flight because it's there as a buffer from hunger. Or because they're too polite to refuse. (At Qantas we won't be offended – even though we prepare special menus for First and Business Class using fresh produce, never frozen. And even though, in First, there's a specially trained Air Chef.)

Above all, don't eat a full meal if your stomach still thinks it's 3 o'clock in the morning. It can't cope.

If you are hungry, avoid gassy foods like onions. The gas in your stomach has already been increased by the decrease in the cabin air pressure.

Crossing time zones confuses the digestive system anyway without any extra help from you.

Should the temptations prove too great – and here Qantas can only apologize for the high quality of our food and drink – you have been warned. Overdo it and you'll land in Australia with your head in a state and your stomach in a turmoil. Or vice versa.

DOES IT MATTER WHO YOU FLY WITH?

The effects of drinking or eating too much will be much the same whichever airline you choose. And even if you don't touch a drop and watch what you eat, a flight as long as the one to Australia will still take it out of you because your biological clocks will be so out of time with the local ones.

A relaxed, comfortable flight will help. And so will making sure you don't rush straight into any meetings. (It also makes sense to arrange meetings at times when you'd be awake at home, otherwise you could be at a distinct disadvantage.)

At Qantas, we can't say our seats and our service, or our wine and our food are the best in the sky. Well we can, but you won't believe us until you've flown with us.

But we can say we fly more people to Australia than any other airline.

And we can say that we've been flying longer flights longer than any other airline. (In fact, apart from KLM we've been flying passengers longer than any airline, and we were the first to offer a separate Business Class.)

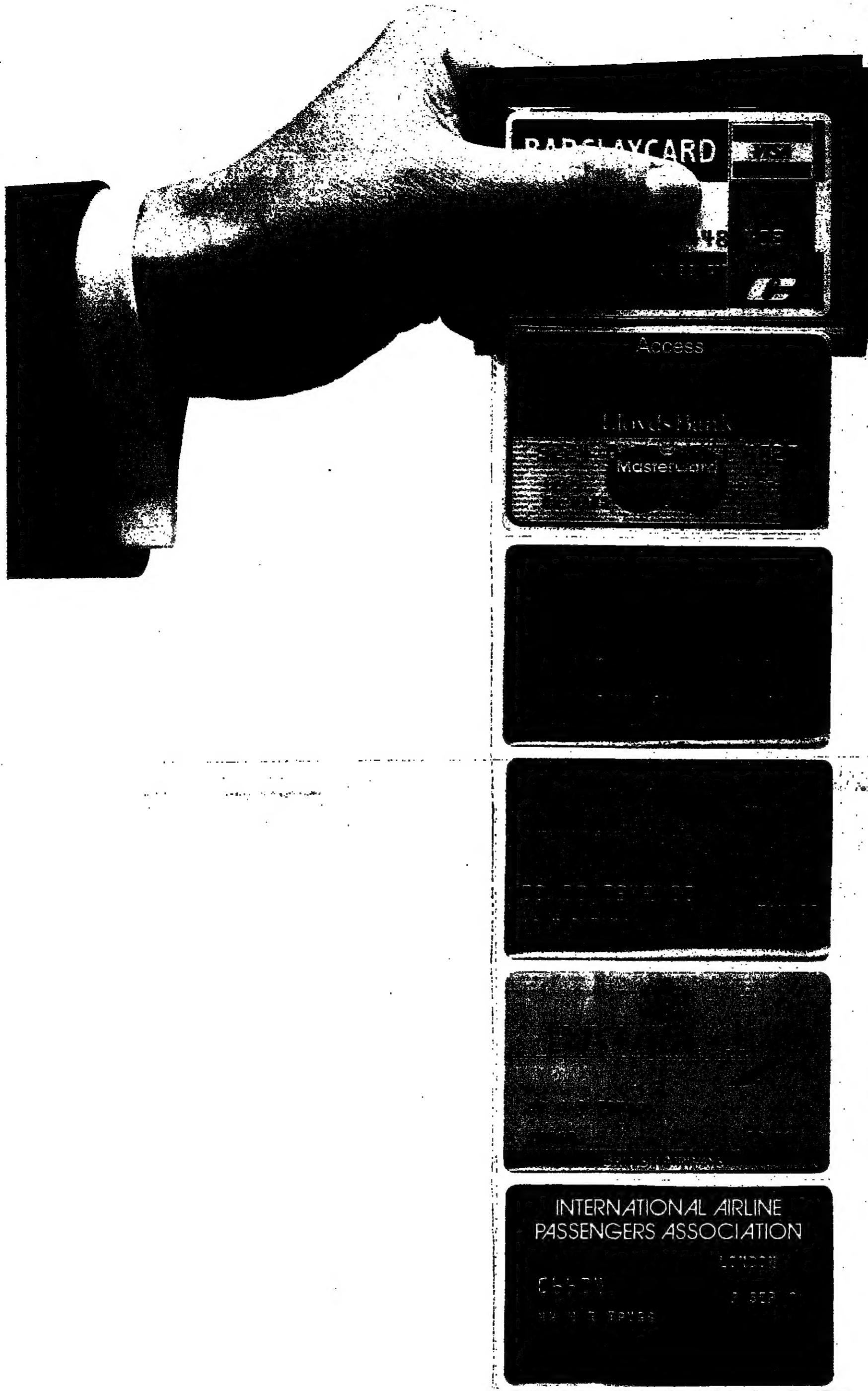
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And if you do have a drink on us, remember alcohol and altitude don't make the best cocktail. Because we'd really like you to arrive down under feeling on top.

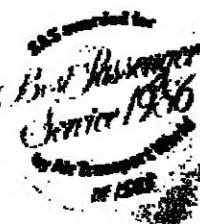
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UK NEWS

Advisers sacked at 'rapid rate' by pension funds

BY BARRY RILEY

PENSION FUND investment management houses are being sacked by funds at an increasingly rapid rate as a consequence of poor investment performance, according to Noble Lowndes, which operates a widely-used performance measure.

This covers some 250 pension schemes and includes data for more than 90 different investment advisory organisations.

The 62 changes of investment adviser recorded last year by Noble Lowndes' Investment Performance Monitoring Service (IPMS) represented a marked increase on previous experience. The company, which is part of the HII Samuel group, says in its annual IPMS report: "This is healthy as it reflects increasing awareness of the financial importance of investment performance."

The report adds that the range of returns among portfolios in 1986 was the widest in the nine-year history of the analysis service. Most of the variation is blamed upon the selection of individual stocks rather than in the selection of different markets such as UK equities, gilts or property, although there was unusually high volatility here too.

The average pension fund, according to IPMS, earned a very comfortable rate of return of 24.3 per cent in 1986. But the best achieved 32.7 per cent and the worst only 7.6 per cent.

Noble Lowndes suggests that stability of the investment management team is the pre-eminent ingredient for success by an advisory firm. But it gives a warning that in 1986 there was a greater number of personnel changes among investment houses than in the past.

The survey says that some pension funds may be paying large fees for an active management service which they are not actually receiving. For the first time IPMS includes a risk-analysis service designed to reveal when managers are so-called "closet indexers" - running a diversified fund which has no real hope of beating the index.

According to the report there was considerable evidence that several of the fund managers were running "closet" index funds. Their portfolios differed very little from the market as a whole, but fees charged were based on a philosophy of attempting to out-perform the market.

Profit-sharing at Heinz

BY OUR LABOUR STAFF

HEINZ, the convenience food manufacturer, plan to introduce a profit-sharing scheme next month. It was negotiated individually with 3,750 employees, rather than through formal union channels.

The company says the scheme, called "prosperity sharing," will operate in addition to an annual bonus paid to workers. It will apply to administrative and research staff at the company's head office in Hayes, Middlesex, near London, and at two production plants.

Under the scheme, employees are offered a choice between a taxable cash payment or an allocation of company shares. Employee shareholders will be entitled to quarterly

dividends on stock beginning in June, 1988, which are valued in US dollars and converted into sterling.

The cash payment and the rate of dividend are worked out by a formula which links annual pre-tax profits with a productivity measure.

The lump sum payment, or share allocation, is made proportionate to employees' existing wages.

In return, the company has asked employees to increase efficiency by accepting more flexible working arrangements, and to "use their own initiative" to increase productivity in their specific job. It says the incentive to do this exists because the prosperity payment depends on increasing productivity.

Deutsche Bank exploits 'good business climate' in Britain

BY IAN HAMILTON FAHEY, NORTHERN CORRESPONDENT

DEUTSCHE BANK has re-evaluated its overseas policy in the light of what it describes as Britain's economic recovery and an improving business climate brought about by lower taxation and competitive unit costs.

The bank has embarked on a programme of expansion in Britain by opening a new regional office in Manchester to help increase its penetration of UK markets.

The new branch will have a natural market of Anglo-German corporate business - there are 120 subsidiaries of German companies in the north of England - but it also hopes to pick up new customers and make some direct investments, possibly in high-technology fields. It will report to the bank's office in London.

The branch will serve the whole of northern England and, if successful, will herald expansion into other British regions. Bristol, with its ready access to the western half of the M4 motorway corridor, is high on Deutsche Bank's list for growth. Edinburgh, Birmingham and Leeds may also be considered.

The bank officially begins its first week of business in Manchester today, although it moved into its new offices in Ship Canal House at £2 per sq ft the city's most expensive and prestigious property - at the beginning of the year.

Mr Hilmar Kopp, the Deutsche Bank main board director responsible for international business, says:

"We have confidence in the economic policy of Britain. There is a good business climate and there has been noteworthy productivity growth. Wages are low and so is taxation."

Mr Kopp, who has personal experience of England's north west as a director of Pilkington Brothers, the glassmaker, said that Labour costs per man hour in West Germany were now £1.37 versus £1.50 in the UK. The top British corporate taxation rate was 35 per cent, against Germany's 55 per cent.

These things have led to a re-evaluation of our policies abroad," he added.

The bank thinks that parts of the north offer great potential. Mr Kopp said: "We believe that the regional economy is undergoing a transformation. We are aware of existing problems but we think that unemployment is going to turn for the better."

He found prospects in high technology sectors particularly appealing.

Pace of management buyouts slackens

BY RICHARD TOWKINS

THE HECTIC level of management buyout activity seen over the last few years has gone into a sharp decline in the first quarter of 1987.

Figures to be published today by Peat Marwick McLintock, the accountancy firm, will show that there have been only three buyouts worth £1m or more in the first three months of this year compared with 10 over the same period last year and 29 in the whole of 1986.

The buy-out of Wickes for £126m at the end of March was Britain's second biggest (after Lawson Marine's £280m in 1985), so the total value of buyouts in this year's first quarter has reversed the decline which became apparent towards the end of last year.

However, Mr David Carter, Peat Marwick's head of corporate finance services, said it seemed incapable that the overall trend of buyout had turned downwards, at least temporarily.

In return, the company has asked employees to increase efficiency by accepting more flexible working arrangements, and to "use their own initiative" to increase productivity in their specific job. It says the incentive to do this exists because the prosperity payment depends on increasing productivity.

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quoted companies to cut-back management teams trying to buy their own companies, and had had the effect of raising the price expectations of vendors.

With interest rates at present levels, only a management team anticipating unusually rapid profits could afford to pay these high prices and still hope to break even after meeting debt charges.

The logical consequence of this is that there is unlikely to be a pick-up in buyout activity until there is a fall either in interest rates or stock market prices/earnings ratios.

Management buy-outs have risen rapidly in popularity since the beginning of the 1980s. This is partly because many conglomerates, after years of growth through acquisition which has been given fresh impetus by the recent wave of mergers, have been trying to rid themselves of subsidiaries which do not fit in with their mainstream activities.

The trend has been accentuated by a relaxation in company law which took place in 1981 allowing companies to raise finance for acquisitions on the security of their underlying assets. This allowed the import of the US-style leveraged buyout.

Mr Chris Brierley, the corporation's managing director in charge of economic planning, has taken on the job of developing new business and looking for suitable acquisitions. He is expected to look abroad for major acquisitions to countries such as Norway, the US and Australia.

British Gas is still bitter about the Government's decision to float off its North Sea oil exploration and production activities as Enterprise Oil. Although it could easily raise the £200m or so that would be needed to buy Enterprise back, this is not seen to be politically practicable.

Similarly any attempt to buy British, the former production arm of the British National Oil Corporation (BNOC) would almost certainly run into political difficulties even if it were feasible in market terms.

Acquisitions chief named by British Gas

By MAX WILDMAN

BRITISH GAS has started to lay plans for an active phase of expansion outside its main UK business, if necessary by a series of substantial acquisitions.

Although the newly-privatised corporation does not appear to have any immediate purchase in view, it is prepared to spend a large amount of money, perhaps £1m or more if it sees the right opportunity.

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Their main work now is trying to pull together into a series of simple themes, possibly under the slogan "The People's Choice." The varied radical commitments to which ministers are now agreed. These include the proposed major education bill, rates reform, privatisation of water, electricity and British Steel,

Thatcher sets date for party 'pep' talk

By PETER RIDDELL, Political Editor
CONSERVATIVE parliamentary candidates from throughout the country have been summoned to a special meeting to be addressed by Mrs Margaret Thatcher, Prime Minister, on the Saturday after Easter, April 25.

She will give them a "pep" talk and set out various pre-election themes in what may be the last collective gathering of Tory candidates before a general election. The venue has been chosen away from London, to allow as many as possible of the candidates in attend.

Conservative Central Office officials stress that there is no intended implication for the choice of general election date and a similar session involving parliamentary candidates was held last autumn.

However, the arrangement of this session shows the desire of the Conservative leadership to keep open all options and to be prepared for a June general election. If Mrs Thatcher decides to call one after the May 7 local elections.

Ahead of these elections senior ministers, and Mrs Thatcher herself, will be careful not to raise expectations about a June poll in case they decide to opt for the autumn.

The balance of expectation among most Tory MPs has now moved, with many qualifications and reservations, in favour of June rather than the early autumn. This is provided Tory support is at, or around, 40 per cent in the opinion polls and the SDP/Liberal Alliance stays in third place behind Labour.

A further sign of the Conservative leadership's desire to be prepared is that work is now well advanced on the writing of the election manifesto. Apart from ministers involved, Professor Brian Griffiths and Mr John O'Sullivan of the Prime Minister's Policy Unit in Downing Street, and Mr Robin Harris, the head of the Conservative Research Department, as well as Mr Stephen Sherbourne, Mrs Thatcher's political secretary.

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UK NEWS

Offshore supply hits rough waters

Kevin Brown looks at the collapse of a secret price-fixing deal among North Sea operators

NO-ONE in the North Sea supply boat industry is prepared to talk openly about the secret price-fixing agreement they called the Coffee Club.

However, there is no doubt that the participants saw themselves as victims of a market collapse and an uncaring government, rather than as rapacious conspirators.

"We are all losing a great deal of money. All we were trying to do was to stop rates absolutely falling through the floor," said a director of one of the leading companies involved.

"We were so desperate for a bit of income that we just had to do something like this to try to keep ourselves in business."

"There is a lot of difference between an agreement in a market where prices are below operating costs, and an agreement where the objective is to force other people out of business."

"We were not trying to do anyone else any harm — just to save ourselves."

Nevertheless, the Coffee Club participants appear to have been in breach of the Restrictive Trade Practices Act, which forbids verbal and informal price fixing, as well as more formal legal contracts.

Operators of international shipping services are specifically excluded from the act, but this section is not thought to cover the UK sector of the North Sea since it is wholly under British jurisdiction.

Price fixing is also generally illegal under the competition provisions of the Treaty of Rome. The EEC has developed exceptions for international shipping, but these do not extend to the offshore market.

Until recently, the offshore sup-

port industry provided supplies, maintenance and marine support to the UK's 32 oil and 16 gas fields.

The industry's small but sophisticated and technologically advanced ships were described by the British Offshore Supply Vessel Association (Bosva) as the "umbilical cord" which kept the offshore production effort going.

Then came the oil price collapse of 1986, which led to a dramatic reduction in oil company exploration activities, and a fall in charter rates and demand for supply vessels.

The worst hit-area was the North Sea, where the British companies already faced tough competition from overseas owners — chiefly US, West German and Norwegian.

The impact has been hardest in the UK sector, where the total number of vessels of all flags has fallen from 173 in October 1985 to 129 in March, while the number laid up has risen from six to 38.

In addition, more than 30 of the 91 ships described as being employed were actually working in the spot, or short-term market, where charterers can be relatively infrequent.

The position is even worse for the British flag fleet, most of which is represented by Bosva. The total number of UK flag vessels has remained relatively steady, and currently stands at 94. However, fewer than 45 are employed in secure long-term charters, while nearly a third are laid up, and nearly 30 percent are working in the spot market.

The unreliability of this market is indicated by Bosva figures showing

that the utilization rate in the fort-

night to March 13 — the latest available figures — was 49.2 per cent. Put another way, this part of the fleet spent, on average, almost 60 per cent of its time idle.

"These limited restrictions compare with tight controls on foreign participation in almost every other oil exploration supply market, however, ranging from local preference in Norway to exclusion by law in the US."

Bosva told the House of Commons Transport Committee recently:

"These measures are driven by the political will to ensure, by whatever means necessary, that a strong indigenous presence is maintained."

"Until recently, this political will has been totally lacking in the UK."

"For the sake of the UK shipping industry in general, and in particular the offshore supply vessel industry, a permanent stand must now be taken, at least until others show evidence of a permanent change of policy to unqualified free access."

The committee will include recommendations on the future of the supply boat sector in its report on the decline of British shipping expected within the next couple of months.

Ministers have shown no willingness to intervene on behalf of British shipowners generally, however, and all the indications are that the pleas of the offshore industry are also falling on deaf ears.

There is likely to be more interest in how a large part of the supply boat industry managed to operate a secret price fixing agreement for so long without discovery.

Criticism of judges 'harming confidence'

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

A SENIOR judge has criticised "the current vogue for instant and ill-informed comment" on judges, which, he says, not only makes their job more difficult but also undermines public confidence in the judiciary and the rule of law.

Sir John Donaldson, the Master of the Rolls — the senior judge of the Civil Court of Appeal — also strongly indicated his support for the view that appeal judges should be given the power to increase sentences in criminal cases.

Addressing a solicitors' conference in Oxford yesterday, Sir John expressed concern about comments

being made on particular decisions by particular judges.

Although not citing instances, he is likely to have had in mind outcries over a recent sentence in a London rape case which was attacked as being too lenient, and the fact that a man convicted of murder during a North London riot had committed the offence while on bail on an earlier murder charge.

It was not without significance.

Sir John said that the "current clamorous criticisms" of judges was largely concentrated on criminal sentences said to be too lenient which could not be appealed.

Whether there should be such an appeal was a matter for parliament, Sir John said, but there was no doubt that it could be provided. He suggested that the Director of Public Prosecutions could be given the task of deciding whether there was an appeal on the ground that a sentence was too lenient.

Implicitly suggesting that the Appeal Court should have the power to increase a sentence, rather than just indicate that the original sentence was inadequate, Sir John commented: "I doubt whether public anxiety would be much relieved if, as proposed, an appellate court had no power to do more than pro-

vide official confirmation of the shared view of the accused and public alike that he had been extremely lucky."

The real vice of attacks on judges, Sir John said, was that the clamour made it more difficult for them to discharge a duty "which is difficult enough as it is".

That was apart from the fact that judges too, had feelings and that it was not very pleasant to be on the receiving end of comments and to be prevented by "the wise tradition of the profession" from answering back or even giving a full explanation.

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FINANCIAL TIMES SURVEY

DO IT
Increasing numbers of 4wd saloon cars are joining the utility and leisure vehicles in this expanding market. All carmakers now have to consider including these models in their ranges to compete, and the cost of this "extra" is reducing considerably as 4wd reaches the volume sectors. Kenneth Gooding, Motor Industry Correspondent, reports.

Second phase of expansion

THE SUDDEN surge of interest in passenger cars with all-wheel drive capability has started a second phase of dynamic expansion in the market for light, four-wheel drive vehicles.

Some statistics help to illustrate the growth rate. In 1979 some 65,000 four-wheel drive vehicles, mainly of the utility type, were sold in Western Europe. Last year the total reached over 317,000, half of them all-wheel drive cars.

According to Automotive Industry Data group figures, sales in 1981 will be close to 800,000, including 480,000 cars.

The first period of extraordinary expansion came during the 1970s in North America when a new type of customer appeared—one who was looking for a "leisure and fun" vehicle rather than a four-wheel drive workhorse.

Demand in the US reached 1m a year and captured the attention of the Japanese who were already well-established in the field.

While most car manufacturers in the West did not bother with utility four-wheel drive vehicles but left the business to a few specialists, seven out of the ten Japanese manufacturers were producing such vehicles.

The Japanese makers found that four-wheel drive vehicles not only offered more useful extra volume for high-value components such as engines, but also gave them access to markets that would otherwise have remained closed.

For example, developing countries which would not permit the import of passenger cars because they were unnecessary luxury, would allow in some four-wheel drive utility vehicles. This enabled the Japanese manufacturers to build up rudimentary dealer networks in readiness for the time when car imports might be started.

The Japanese were also ready, therefore, to take advantage of US demand as it boomed up in the 1970s. The market began to fragment and began to parallel the passenger car business in the variety of models available.

These range from small runabouts offered by such companies as Daihatsu and Suzuki, through the workhorses represented by Land Rovers and Toyota Land Cruisers, to the executive-type Range Rover.

This was far cry from the original concept: the wartime Jeep, a rough-and-ready but

Four-Wheel Drive

Land Rover ploughing through the rough stuff.

totally reliable all-terrain vehicle suitable for military use.

Military development played a big part in the early days of four-wheel drive. The US used vehicles of this type in 1918 in the Mexican war instead of

It was not until June 1940, though, that the US Army drafted a specification for an "ideal" four-wheel-drive, general-purpose vehicle and scout car. No fewer than 32 manufacturers were invited to bid but only two showed any interest and the contract went to one of them, Willys-Overland of Toledo, Ohio.

The various all-purpose vehicles in the States had been called Jeeps since the 1930s, apparently after a character in the Popeye cartoons, and in 1945 Willys, which produced more than any other manufacturer (600,000 between 1941 and 1945) registered the name as its own trade mark.

As the US Army spread its influence throughout the world during and after the war, so the universal potential of four-wheel drive became apparent. Demand from the military, fire brigades, foresters, police and so on built up to give companies like Willys-Jeep and Land

Rover in the UK steady business.

But the recent history of Jeep, the company which more or less started the four-wheel drive phenomenon, has been chequered. It was acquired by American Motors, fourth-largest and weakest of the US car companies.

It was caught off-guard both by the leisure boom and the subsequent oil supply crises in the 1970s which caused light four-wheel drive vehicle sales in the States to collapse from more than 1m to 371,000 in 1981.

At that point Japan overtook the US as the major producer of light, four-wheel drive vehicles and Toyota with its Land Cruiser displaced American Motors-Jeep as the main individual producer.

The Jeep business has clawed its way back to profitability, helped by the introduction of lighter and less-thirsty products and a return to healthy demand in the States.

Last year sales of light utility, all-wheel drive vehicles in the US exceeded 1m again and Jeep accounted for 207,515 of them.

True to form, the Japanese makers between them took a quarter of sales in the sector. Production of light four-wheel

drive vehicles in Japan was well above 800,000 last year and the volume market was growing.

By end of year both Jeep and Land Rover are under consideration.

American Motors is in the process of being bought by Chrysler, third-largest of the US car groups, from Renault of France which had a near 60 per cent shareholding and management control.

Chrysler makes it clear that the now highly-profitable Jeep business is one of the main attractions of the deal because there is nothing like it within Chrysler's present organisation.

Meanwhile, Land Rover, which started producing its four-wheel drive vehicles in 1945 and today is part of the state-owned Rover Group, was to have been sold last year to General Motors of the US, the world's largest automotive group.

But no great was the outcry that this famous British asset should be passed on to an American company, that the UK government was forced to withdraw its offer.

Land Rover has been retained as part of Rover and there is some hope that it might be privatised by way of a stock market flotation in two or three years' time.

This is a difficult objective because Land Rover has been suffering from the almost total collapse of its sales in its traditional export markets in Africa and the Middle East which pushed it into the red financially.

The company has been concentrating its attention on the opportunities offered by the expanding leisure business in the developed countries.

Its company, all-terrain vehicle, the Land Rover, has just been launched so as to appeal to private buyers as much as military and quarry military customers.

It remains to be seen whether these efforts by Land Rover and other producers of utility vehicles will be overtaken by the latest changes in the light four-wheel drive sector—the very fast advance in demand for passenger cars incorporating this technology.

The starting point for the four-wheel drive car boom came in March 1980 when the Volkswagen group launched its Audi Quattro.

Subaru of Japan, looking for a niche in the competitive world car markets, had launched its all-wheel drive capability before 1980 but they attracted little attention.

However, once the Audi Quat-

tro began to win one rally after another, other European and Japanese manufacturers decided they must get in on the act—winning rallies is very good for a maker's image in some countries.

And, "image" subsequently became an important element in the development of the four-wheel drive car market. While it makes sense to pay the premium for all-wheel drive in countries like Austria and Switzerland where winters are harsh and mountain roads can be steep and treacherous, there is no practical reason for investing in such capability in much of France and Italy.

But today no car maker in the world can ignore the trend. The reason is summed up by Mr John May of Automotive Industry Data: "Four-wheel drive has the potential to become the new status symbol of the late 1980s and early 1990s, possibly taking over where turbos and now 16-valve and 24-valve engines are leaving off."

The combination of functional advantages on one hand and image-related issues on the other are virtually certain to boost the demand for four-wheel drive cars to nearly 800,000 in 1991."

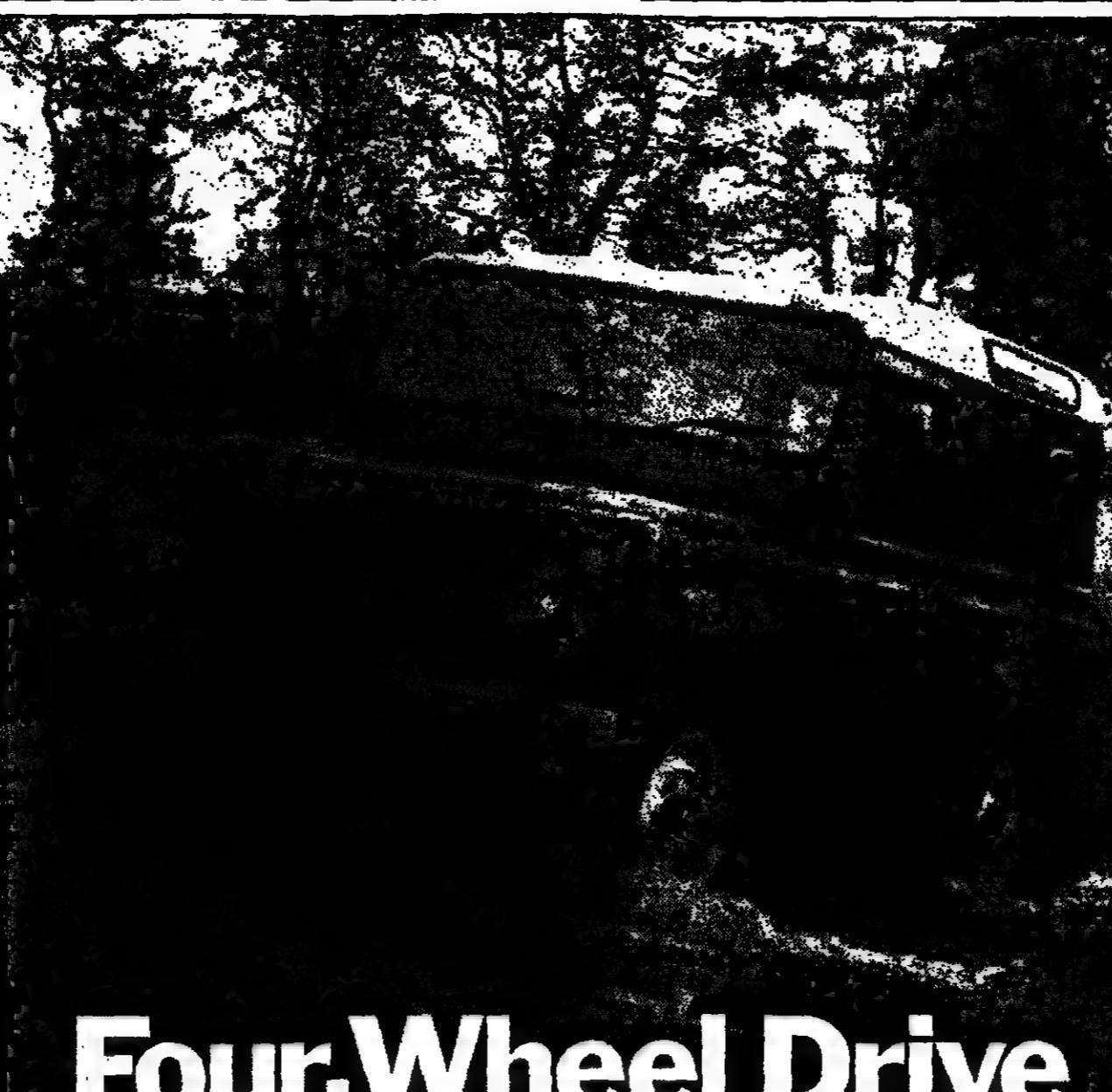
An important element in the continuing climb in demand is that the cost of four-wheel drive will come down sharply. In AID's publication "European 4x4 Prospects to 1991", Mr May says: "An estimate that the current retail price for a permanent four-wheel drive of around 30 per cent over the two-wheel drive price will come down to around 10 per cent in under five years."

Between the European and Japanese will help bring prices down, apart from the fact that increased volume should cut the cost of producing four-wheel drive components.

However, if all-wheel drive cars should prove less reliable than their two-wheel drive counterparts, or more expensive in service and repair, the drop in used-car values this would bring in its train.

Mr Leslie Allen, a director of Glam's Guide, says that in the UK at the moment buyers of four-wheel drive cars are "not overly influenced by common sense." But secondhand models are so much in demand that they hold their value better than two-wheel drive cars.

This is even true of the Ford Sierra 4x4 where, according to Mr Allen, demand and supply are in balance.



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FOUR-WHEEL DRIVE 2

Cars

Cost cuts open volume markets

IT IS possible to argue that every car should be made with four-wheel drive, simply because it offers the maximum grip for any vehicle on any surface and is, therefore, safer than front or rear-wheel drive alternatives.

According to some forecasts, the signs are pointing unmistakably in this direction.

A study by analysis Automotive Industry Data¹, for example, predicts that West European sales of 4wd-equipped cars (excluding vans) will rise like the Range Rover and other purpose-built 4wd vehicles will soon from 108,000 last year to 480,000 in 1990-91, representing about 4 per cent of a new market expected by that time to have grown from about 10.5m units to 11.5m.

And unlike the four-wheel drive utility sector—where it says all the running is being made by Japanese producers—AID predicts that 4wd will perform well among European car makers.

Pointing out that by the start of last year four-wheel drive car output in Western Europe had already increased 28-fold in three years to 69,000, from 2,425, AID predicts European output of 620,000 cars in 1991, representing more than 5 per cent of all new car production.

The increased volumes, and consequent improvements in economies of scale, could allow a reduction in on-costs compared with conventional two-wheel drive systems from 30 per cent to about 10 per cent, AID predicts.

Thus by then the virtuous circle would be well under way in which, rather like disc brakes in the past, four-wheel drive would eventually become the norm even in economy cars. The

future additional cost of permanent 4wd is expected to be no higher "than the cost of a replacement set of new winter tyres," according to Dr Ferdinand Piech, Audi's long-time director of technical development.

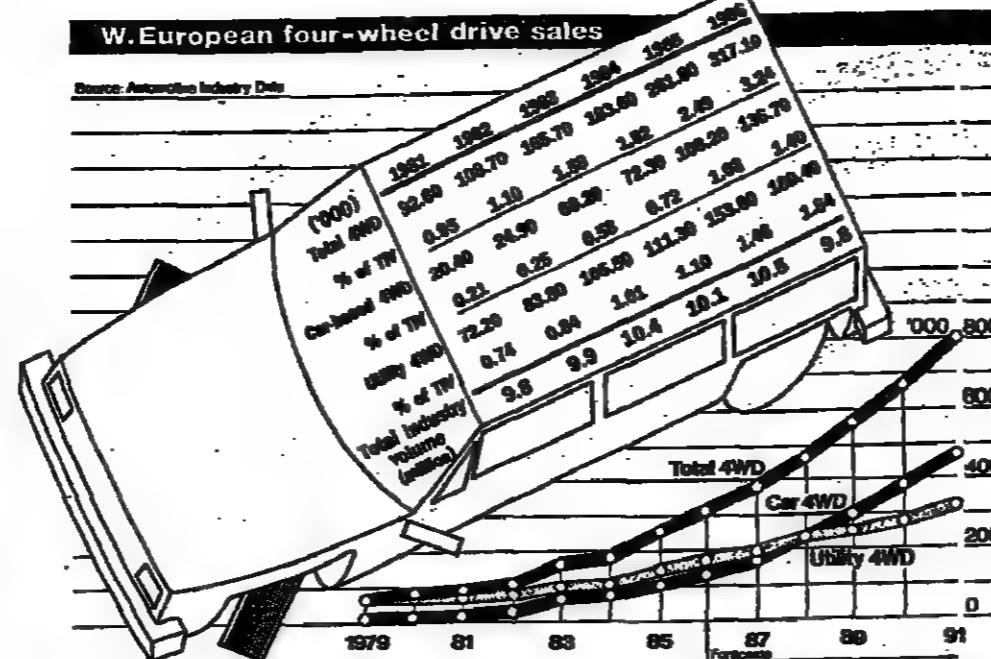
AID accepts that whereas the advantages of four-wheel-drive for rough-terrain work have long been recognised by the utility vehicle sector, the virtues for normal road use have not been so widely appreciated in view of the extra cost.

However, "the positive commercial marketing prospects for 4wd have now been recognised by the key decision-makers in virtually all passenger car companies in the world over; not just by the think tanks and advanced strategy departments but by down-to-earth managers who are faced with the day-to-day product decision."

At present, about 11 kinds of four-wheel drive cars were on sale. By the first quarter of last year 37 were available and there has been a further marked proliferation, to well over 50, since then.

Not surprisingly, with the odd notable exception of the Fiat Panda 4 x 4 and some Subaru models, four-wheel drive in cars has been working its way down the market from initially more expensive models up to the lowly Audi 50 range launched late last year, the 50 Quattro's four-wheel-drive system automatically "shares" the driving force transmitted between front and rear wheels according to the amount of grip available, subject to a maximum 75 per cent 21 per cent differential.

Recently, the Audi/VW group has extended its 4wd offering downwards further, to the Golf with its Syncro model and even



Europe, representing some 415,000 vehicles.

At the other extreme, development of small 4wd cars is associated with AID to be much slower, reaching only 25,000 units in 1991, or less than 1 per cent of the sector total.

Audi, for one, has already implemented its policy declared shortly after the Quattro's launch, that it would offer a 4wd variant of every model in its range. And the systems it deploys have become ever more sophisticated.

Thus in its latest model, the new Audi 80 range launched late last year, the 80 Quattro's four-wheel-drive system automatically "shares" the driving force transmitted between front and rear wheels according to the amount of grip available, subject to a maximum 75 per cent 21 per cent differential.

Recently, the Audi/VW group has extended its 4wd offering downwards further, to the Golf with its Syncro model and even

the relatively conservative Mercedes is offering it, initially on estate cars, having earlier felt it was not necessary to do so. At AID points out, the change of tack by Mercedes seems to suggest that "even those who still have not made up their minds in full as to the real commercial significance of 4wd are literally being forced by competitive pressures to follow."

In engineering terms, new laws that manufacturers now have to follow in the pipeline should make the four-wheel drive option much less problematical, as most are being designed from scratch to accommodate the extra propeller shaft and differentials.

The reduction in costs is likely to run in parallel with intensified marketing campaigns stressing four-wheel drive's advantages of safety, performance or simply sophisticated "image" depending on the market being addressed.

The performance message has

already been firmly rammed home among enthusiastic buyers by developments in the world of rallying, particularly where 4wd cars have hopelessly outclassed all two-wheel-drive rivals.

And manufacturers will be keen to build on an already growing awareness among non-enthusiastic buyers about the extra security offered by 4wd, even on smooth highways, as well as in the adverse conditions of mud, snow or fog.

The one obvious potential drawback with four-wheel drive apart from initial cost is whether generally higher servicing and repair costs will materialise as a result of its greater complexity, and whether this might adversely affect resale values. As yet there is no evidence that this will be the case.

"Europe 4 x 4 Prospects to 1991" (Automotive Industry Data, 34 St John Street, Lichfield, Staffs, WS13 6PE).

John Gammie

The US

Leisure demand rises

AMCI'S DECISION in 1986 to discontinue production of its venerable CJ Jeep line after a run of over 40 years and to replace it with the slicker, sportier Wrangler is a good illustration of a fundamental shift in direction of the US four-wheel drive market during the present decade.

"As little as five years ago, four-wheel drive was regarded as the almost exclusive preserve of utilitarian, often ungainly, workhorse vehicles for those—like farmers—who jobs necessitated regular off-road driving. Today, the emphasis is increasingly on leisure."

Improved all-wheel drive light vehicles in various categories have been developed to capitalise on the sector's newly found sporty, fun-and-leisure image and the vehicles' reputation for good roadholding in adverse driving conditions.

"Are you having fun yet?" inquired the posters advertising the Suzuki Samurai, a bottom-of-the-range utility vehicle, when it was launched on the Gulf and West coasts in November 1986.

The proliferation of new vehicles, ranging from versions of production cars through light utility vehicles to the increasingly diversified pick-up truck sector, has considerably expanded the four-wheel drive market—often at the expense of standard, two-wheel drive saloon cars.

"People who would have bought an Impala 15 years ago are now looking at the Bronco, Ford's light utility vehicle," says Mr Steve Campbell, editor of Petersen's Publishing's 4-Wheel & Off-Road magazine.

Sales accordingly have risen sharply. Between 1983 and 1985, production of four-wheel drive light trucks in the US more than tripled from 330,000 to 1.03m—close to 30 per cent of overall light truck output. Over the same period, retail sales of four-wheel drive cars climbed from \$11,000 to a record 17,000, giving them a 1.5 per cent share of the total US car market.

Not surprisingly, competition is intensifying—particularly in the utility plus leisure sector where, according to Mr Campbell, demand has "exploded" since Chevrolet unveiled its S-10 Blazer in the autumn of 1982. Seven marques, four of them Japanese, are now vying for predominance in the "downsize" sports/utility sector, with a further five models competing in the "plus-size" market.

They were originally scheduled to be joined in March by Britain's Rover Group, which is anticipating first-year sales of some 3,000 Range Rovers through its Maryland-based subsidiary, Range Rover of North America. With an expected price tag of \$30,000, the Range Rover will compete very much at the luxury end of the market.

While overall demand for these vehicles remains strong, the expanding range of available models is beginning to tell on the sales figures of some of the stalwarts. Chevrolet, for example, sold only 160,000 S-10 Blazers in 1985 (110,000 of them with four-wheel drive), down from over 187,000 the previous year. Meanwhile, 1986 sales of four-wheel drive Ford Broncos had edged up just 5 per cent to about 107,000.

Both appear to have been hurt by the familiar Japanese tactic

of importing downsized versions of the most popular American models, the ruse previously employed to such great effect in the car market. While sales of the S-10 Blazer seem, for the moment, to have peaked, the likes of the Isuzu Trooper and the Samura continue to gain share.

Nearly 37,000 Isuzu Troopers were sold in 1986, up from 25,000 in the year earlier. Meanwhile, the Suzuki Samurai again sold 47,000 in 1986, its first full year on the market, and continues to do well with a further 12,300 sold in January and February 1987.

Despite this, Chevrolet's Mr Ed Leichtman remains confident that "there are still no end of niches to exploit."

"In another year we will have a more powerful engine in the S Blazer," he says. "That will create a market standard."

There are also plans for a more luxurious version of the S Blazer to be developed, targeted at "Mercedes and BMW drivers who want a second niche."

Nicheshipping is currently the name of the game too in the pick-up truck market, where about 25 per cent of vehicles sold are equipped with four-wheel drive.

While sales of full-sized pick-ups in the absence of foreign competition by Chevrolet and Ford—remain exceptionally strong, attempts to create a medium-sized niche (just as the compact market was developed 10-12 years ago) are threatening to wear some buyers away.

The recently-announced Chrysler-AMC merger will bring both major medium-sized

entrants—the Jeep Comanche and the Dodge Dakota—under the same roof, however. It will be interesting to see whether this serves to strengthen or dilute the fledgling category's challenge.

Meanwhile, makers of the larger pick-ups are hitting back, according to Mr Campbell, by taking the sporty appeal of the "smaller truck." The states are large pick-ups of both Ford and Chevrolet outperform the car.

The all-new 1988 Chevrolet C/K full-sized pick-up will boast independent front suspension (like its main rival, the Ford F-Series), anti-lock rear brakes and a steering gear system designed to enhance manœuvrability. "It is to the full-sized pick-ups what the pocket calculator was to the slide rule," claims Mr Robert Burger, Chevrolet general manager.

Chrysler division engineers,

meanwhile, are believed to be

working on an all-wheel drive transaxle for application by the early 1990s.

Overall, while the four-wheel drive sector will do well to sustain the growth rate of recent years, prognostications remain positive. "Buoyancy will be the character for the next couple of years," says Mr Chuck Brady, an analyst with New York-based Greenwich.

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Overall, while the four-wheel drive sector will do well to sustain the growth rate of recent years, prognostications remain positive. "Buoyancy will be the character for the next couple of years," says Mr Chuck Brady, an analyst with New York-based Greenwich.

However, instead of buying the couplings from local supplier, Tochigi Fuji, Honda decided to make them itself and negotiated a licence directly with GM.

Meanwhile, in the US, GM has set up a joint venture in Japan to produce viscous coupling units for four-wheel drive vehicles. This company is supplying Nissan with the latest Pulsar/Sunny range.

Data on sales of leading 4WD utility models in Japan indicates that this market has expanded by over 30 per cent in 1986, 12 per cent in 1985. Demand was slowed by the commodity tax on some 4WDs was raised to the same level as for passenger cars. Sales approached 120,000 units in 1986, equivalent to 4 per cent of the new car market.

Exports rose by 16 per cent to 712,000 units or more than 85 per cent of four-wheel-drive output in 1986. In 1985, principal destination was the US, which accounted for half of the world 4WD market. There sports/utility 4WD sales totalled 800,000 units last year—many of these

pickups.

Sales to Africa and the Middle East remain in decline but other major export markets include Australia and Europe, particularly West Germany, France and Switzerland.

Military orders are an important element in sales of utility 4WD vehicles but here the strong yen is proving to be a

mixed blessing.

That programme was completed early last year but the achievement was completely obscured by a major political row about the Land Rover programme.

A production rationalisation programme was started to bring production together on one site.

That programme was com-

pleted early last year but the achievement was completely obscured by a major political row about the Land Rover programme.

The Economist Intelligence

Unit says, for example: "If

(Land Rover) is to be sold by

the Rover Group and remain British

there would seem to be only one option—an amalgamation with

Jaguar."

David Owen

The UK market is being penetrated by volume saloons, says Kenneth Gooding

Car successes boost registrations

THE UK contributed its fair share to the European boom in sales of cars and light utility vehicles with four-wheel drive last year. Registrations soared by more than 20 per cent from the 1985 level to a record 42,635.

In the passenger car sector the outstanding success was Ford's Sierra XR 4x4 which dominated the business with 5,580 UK registrations last year. This represented nearly 5 per cent of total Sierra sales in the UK.

Ford also did well with the new Granada 4x4 which found 1,145 buyers, equivalent to more than 3 per cent of the total 1986 sales of the group's "flagship" model.

The utility sector did not perform so strongly and registrations last year were virtually unchanged from those in 1985.

Some of the Japanese vehicles, which are in command of the cheaper end of the utility sector, showed significant sales advances, however.

In particular, the Suzuki SJ, the current Western European best-seller, showed a 28.6 per cent sales increase in the UK in 1986 to 4,430. This year sales of the SJ will jump again because the vehicle is now in production at the Land Rover Santana factory in Spain and can escape the restrictions on vehicle ship-

ments from Japan to Britain.

At the up-market end of the sector, Range Rover sales were boosted by 25 per cent to 4,225. So the Range Rover kept its position as the best-selling vehicle in the class.

This was in spite of its price being much higher than Japanese vehicles such as the Mitsubishi Pajero/Shogun which advanced by nearly 18 per cent to 2,605 registrations last year.

About 10,000 Land Rovers were exported to those territories last year, down from 20,000.

This did not take the Land Rover company by surprise. It had been some time been developing the Land Rover range, particularly the Range Rover models to aim them more at developed markets to make up for the lack of cash available in traditional export markets.

So Land Rover managed to hold unit sales in the UK and other European markets about level at 10,500 last year.

Output of Land Rovers peaked in 1975 at 58,521. Production fell behind demand and Sir Michael Edwardes, in the early months of his chairmanship of what was then called British Leyland, instituted a £200m investment programme to boost capacity.

As it became apparent during subsequent years that the Japanese were winning a major chunk of Land Rover's business, particularly in the Far East and Africa, the programme was scaled down, stretched over a longer time and the main thrust

of the Rover Group board was to ensure that the company should remain part of the sister-owned enterprise for another few years in the hope that Land Rover's performance improves enough to make it a potential candidate for a stock market flotation.

Much will depend on whether Range Rover sales continue to increase in Europe and on the vehicle's performance in the US where it was launched for the first time last month.

The company hopes to sell 3,000 of the \$30,850 Range Rovers in the States this year through a network which currently has 28 dealers but ultimately will have 60.

Those taking a conservative view of potential US sales reckon that 7,000 to 8,000 Range Rovers is a reasonable annual target. Optimists suggest sales could reach 15,000.

Rover is committed to returning the Land Rover company to the private sector eventually but many observers believe the four-wheel drive company will not be able to stand alone.

The Economist Intelligence

Unit says, for example: "If

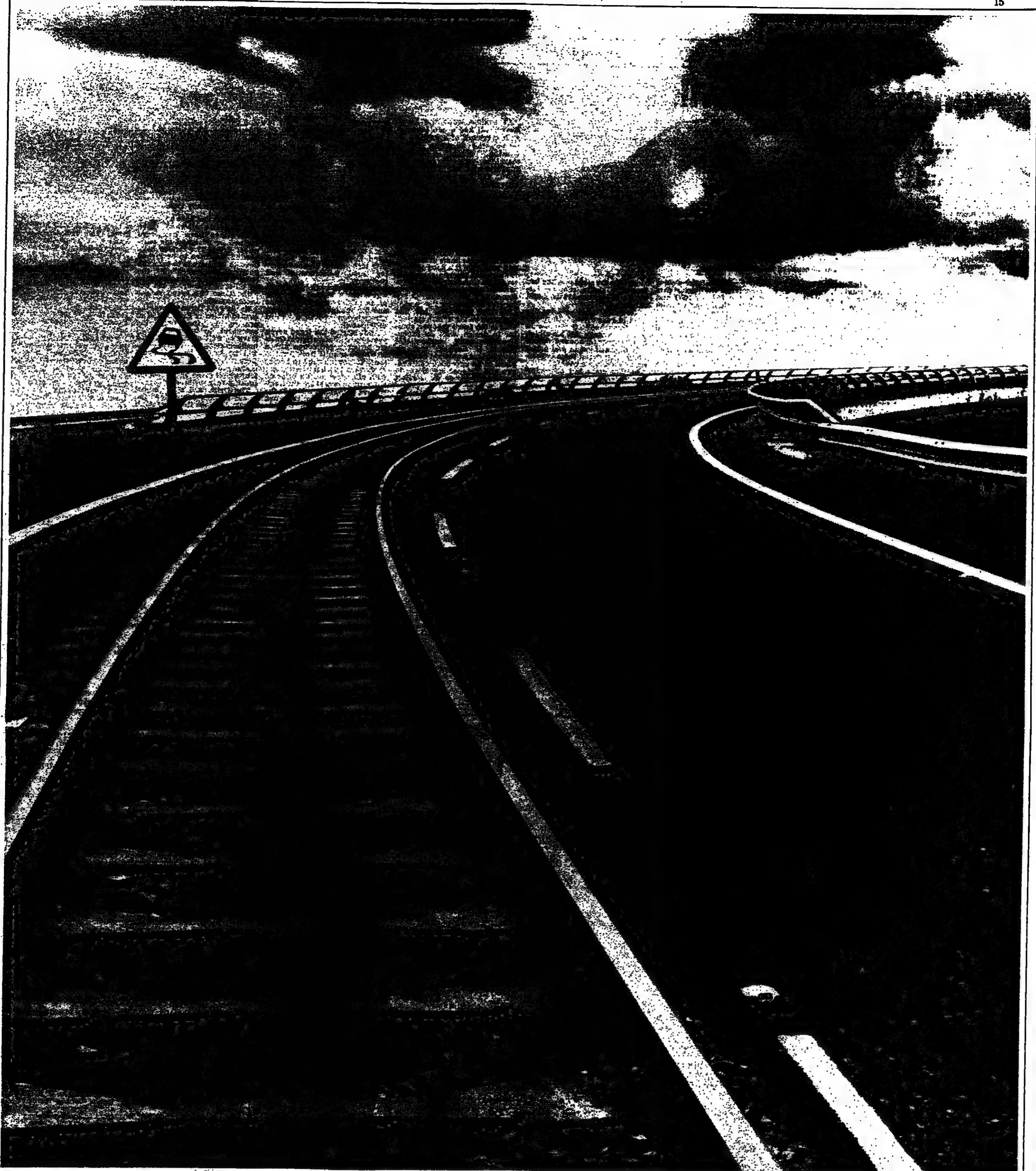
(Land Rover) is to be sold by

the Rover Group and remain British

there would seem to be only one option—an amalgamation with

Jaguar."

Source: Automotive Industry Data



All Audi cars are now available
with four wheel drive.



FOUR-WHEEL DRIVE 4

Stuart Marshall reviews some of the many models available.

Vehicles for the wilds—and SW3

FOUR-WHEEL drive overcomes lack of grip between tyre contact patch and the surface it is running on. That is the simple truth but it has many facets.

Tyre grip may fail because the surface is covered with snow and ice or consists of soft sand or deep mud.

On metalled roads, a shower of rain may be enough to make a car with a very high power-to-weight ratio unstable when accelerating. Hot hatchbacks—small family-type cars with fuel injected, multiple valved and turbocharged engines—benefit greatly from having four-wheel, not just front-wheel, drive.

There are two principal types of four-wheel drive—full or part-time. The full-time system, most often, feeds the engine's torque to all four wheels without giving the driver any option. The part-time selectable or on-demand four-wheel drive allows the driver to decide when to put power through to the rear wheels of a front-drive car, or the front ones of a normally rear-drive car.

Mercedes-Benz even has a 4-MATIC selectable system in which the choice between rear-wheel and all-wheel drive is made instantly by a computer triggered by loss of grip at the rear wheels.

So vehicles now exist to cater for every conceivable kind of service in which all-wheel drive is either desirable or essential. In fact, buyers often choose a product least suited to their real needs. Thus many Range Rovers, expensive engines to be considered performers across rough country, are used as prestige runabouts, never climbing anything steeper than



Lancia Prisma—its fluid coupling redistributes torque.

a high kerb in London SW3. And the little Suzuki SJ, a mountain goat off the road, is bought as a female fashion accessory, complementing high boots and tight designer jeans.

Classification of the 4x4 cars and utilities has become difficult. The simplest way is to divide them into off-road and highway-only types with a further separation into those with on-demand and full-time four-wheel drive transmission.

On-demand four-wheel drive is mechanically simple. A small front-wheel drive car like a Fiat Panda, Lancia Y10 or Subaru Justy is equipped with a rear final drive, connected by a propeller shaft to the main gearbox. When extra traction is needed, the propeller shaft is clutched and the engine's torque distributed equally between all four wheels.

Any of these little cars will then romp up steep snow-covered hills, haul themselves out of muddy car parks at race

alongside the main gearbox has propeller shafts running forward and backward to front and rear axles.

Normally, these vehicles are used in rear drive, with power being switched to the front when necessary. As long as high and low gear ratios are good, driving skilfully, will get in and out of places that would seem impassable to a wheeled vehicle.

In this class the Mercedes-Benz G-Wagen is unusual in having front and rear axle differentials that may be locked for extreme conditions demanding maximum traction. Only if all four wheels fail to find any grip will the G-Wagen come to a halt.

The front-drive vehicles used to be a rough, tough machine with no frills, designed for a life of hard work. Gradually they became popular among buyers as car substitutes, their pulling power exploited to tow horse trailers but rarely venturing far from the beaten track.

At a time when the Land Rover still had a cab interior with overtones of a wartime 3-tonner, the Japanese began offering similar off-road machines with the creature comforts of a car. The Range Rover and G-Wagen were too expensive for most recreational users of such vehicles, many of whom saw like the idea of a diesel engine to curb a dip-somewhat thirst.

The Shogun has been particularly successful, accounting for 30 per cent of Mitsubishi's UK sales at present. Independent front suspension (most other off-road 4x4s have beam axles front and rear) give it a good ride on the highway. Mechanical refinement—no transfer case whine, a smooth gearbox and power steering—make it agreeably car-like to drive on the road.

It first real rival has just appeared on the British market. This is the Isuzu Trooper, similar in design with an independent front, turbo-diesel engine if desired, and an interior that would not be out of place in an executive car. Shogun and Trooper are closer to the Range Rover for comfort and refinement but priced nearer the Land Rover level.

The Range Rover still serves as a benchmark for luxury 4x4 manufacturers but its price puts it beyond the reach of many potential customers. However, it will find that a Land Rover has most of the Range Rover's mechanical virtues, including long-travel coil springs for ride comfort on and off-road, and permanent four-wheel drive because the engine was mounted in-line and overhangs the front wheel centre line.

Subaru Justy—small hatchback that can confidently tackle farm tracks.

The Land Rover is still less than full-time all-wheel drive have either been transverse engined or designed for rear-wheel drive. The former have needed the drive to be turned through 90 degrees to take the power to the rear wheels; the latter a transfer case similar to an off-road transfer case but without the two-speed ranges incorporated.

Mercedes' 300 Turbo 4x4 was the first to arrive in Britain and at present is the only hot hatchback to boast all-wheel drive as well as 16 valves and turbocharging. In a few weeks it will be joined by the Lancia Delta, with a 2-litre turbocharged engine, permanent four-wheel drive and a torque-sensing rear differential.

The Delta will sell for just under £14,000—dearer than the SW3 but less than any Audi Quattro of comparable performance.

Like the Lancia Prisma 4WD saloon, the Delta has a Ferguson viscous coupling on dry roads, but switches to a front differential on wet roads. It also has a choice of two all-wheel drives, one with a lockable centre differential as a traction aid in difficult conditions.

Other cars that have appeared with full-time all-wheel drive have either been transverse engined or designed for rear-wheel drive. The former have needed the drive to be turned through 90 degrees to take the power to the rear wheels; the latter a transfer case similar to an off-road transfer case but without the two-speed ranges incorporated.

Variations of the system used by VW and Lancia will be appearing on many European and Japanese cars in the near future. It probably strikes the best balance providing all-wheel drive security without demanding any special knowledge from the driver. The small Honda Shuttle estate also has such a system.

Ford is the first high-volume European manufacturer to have offered full-time all-wheel drive, on its Sierra and Granada (Scorpio) models. A transfer case leads the drive from the main gearbox forwards to a front differential on these normally rear-wheel-driven cars. A Ferguson viscous coupling prevents slippage on dry roads, but redistributes torque (split 33 per cent front, 66 per cent rear until wheel-slip acts).

Both Sierra and Granada are not completely conventional cars though with much better behaviour when accelerated hard out of slippery corners than one has any right to expect. This is the hallmark of any car with full-time four-wheel drive.

All Audi models from the 80 upwards may now be had with Quattro transmission. The Audi was particularly easy to convert to all-wheel drive because the engine was mounted in-line and overhangs the front wheel centre line.

BMW has a similar four-wheel drive system to that used by Ford, available on its 325i and M3 saloons, which it has just decided to import into the UK on special order.

But all-wheel drive cars are not invincible. However clever the system, it depends ultimately on the adhesion between tyre and road.

Spain

Difficult path into the EEC

THERE ARE times when it makes sound business sense for nations to play the role of pioneers. This is very much the case of Nissan-Motor Iberica and of Suzuki-Land Rover Santana in Spain's often perplexing four-wheel drive vehicle sector.

In 1986 the pattern emerged of Suzuki following along a path that Nissan had already dared to tread. The first step alone is having trouble with the foreign partners. Then it is a case of buying in another.

Nissan did exactly this when it displaced Massey Ferguson in Motor Iberica. Suzuki is doing something all too similar in Land Rover Santana at the expense of British Leyland.

The process, simple enough on paper, is fraught with frustrations, however. Nissan, which produces the Patrol range as well as the Vanette, has discovered to its cost that running Motor Iberica's Barcelona plant is a far greater undertaking than it originally expected.

Nissan moved to Barcelona in 1980 by acquiring Massey Ferguson's 36 per cent stake in Motor Iberica. There was much talk then, as there is in Suzuki-Land Rover Santana now, of using the Spanish company as a springboard into Europe.

What Nissan quickly discovered was that it had to keep investing into its pockets to keep Motor Iberica going. The Japanese company's stake increased far faster than the original low-profile strategy had mapped out, for Nissan alone was willing and able to inject new capital into its ailing Spanish partner.

Motor Iberica is now as wholly Japanese as makes no difference and its management is doing its best to fit its forecast of a fully competitive and modernised, profitable company by 1990—which is six years later than originally planned and after writing off billions of pesetas.

Figures vary but Nissan is generally reckoned to have spent Pta 40bn on Motor Iberica and have an equivalent amount earmarked for investment in the company over the next five years.

The overall feature of Spain's car industry in 1986 was that domestic demand, after years in the doldrums, picked up smartly to rise by 12 per cent. Production was up four per cent though exports were down by nearly nine per cent.

Four-wheel drive vehicles as a sector showed a huge leap forward in production with the manufacture of 36,370 vehicles—a 22 per cent rise on the 1985 figures and an export

increase of 51 per cent (16,876 units). Nowhere, domestic sales slipped by 34 per cent.

The Spanish as a springboard approach at last appears to be working, at least as far as Japanese four-wheel drive vehicles were concerned. Last year Nissan pushed its export sales up from just over 11,000 to close on 16,900.

Suzuki with its Santana model demonstrated the value of following the pioneer. The Japanese input to the company made possible a remarkable export performance for Land Rover Santana, which went from just under 8,000 units in 1986 to more than 13,000 last year.

Suzuki moved into Spain the same year as Nissan. In 1980 both Japanese giants believed that Spain was as good as inside the European Community although, in the event, membership had to wait a further five years.

The original agreement with Land Rover Santana was little more than a contract to build a small number of Suzuki Santanas at the British company's subsidiary. It was in mid-1984 that Suzuki took a somewhat timid plunge into the Spanish market by moving in on a share increase and acquiring an 8 per cent equity for a nominal value of Pta 150m.

Last year Suzuki's intentions in Spain became clearer. The Japanese company was the sole bidder in a further capital increase and its share equity increased to 17 per cent.

Suzuki gained a further two members to join the one it already had on Land Rover Santana's board. Rover Group's stake meanwhile went down from 45 to 33 per cent.

What was most revealing was that the general shape of Land Rover Santana as a company could, in 1985-86, be described as challenging if one looks back to 1980. In 1985 the company posted losses of Pta 1.1bn on income of Pta 26.6bn and it was strapped by short-term debt.

Land Rover Santana desperately needed to modernise and radically alter its production line, to restructure its debt and reduce labour costs.

Last year there were signs of a cure in process. Provisional figures showed that losses had been reduced by 32 per cent to Pta 763m, production was cut back and short-term debt reduced by Pta 4.2bn to Pta 8.6bn.

Plans were announced to reduce the 4,140 labour force, mostly concentrated in Suzuki's plant in Linares, in southern Spain by 630 and an investment plan totalling Pta 7.1bn was announced.

If Nissan last year was claiming it could see light ahead in the Motor Iberica tunnel, the betting was on Suzuki, sooner rather than later, claiming the same for Land Rover Santana.

Tom Burns

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New factory for Sony in South Wales

IDC has won its fifth factory building contract for Japanese electronics manufacturer Sony, writes Joan Gray.

The latest order, worth a guaranteed maximum of £2m, is to design and build a 6,000 sq metre extension to the existing toy and games factory at Bridgend, near Cardiff, South Wales. The project is the fourth undertaken by IDC for Sony at Bridgend, and will double production capacity.

IDC's work for Sony has also involved working with the company's own engineers and visiting Japan to make sure that UK standards of engineering, building, design and mechanical engineering have complied with Japanese standards.

Indonesian embassy renovation

The refurbishment division of COSTAIN CONSTRUCTION has been awarded a £2.3m contract to refurbish the Embassy of the Republic of Indonesia at 38 Grosvenor Square, London, which includes some minor alterations to main structures will be carried out. The main building fronting on Grosvenor Square is Grade II listed. This is to be restored, including the facade, stonework and principal rooms which include some fine panelled rooms. The new Ambassador will be based in the Embassy, occupying a mess at the rear with main elevation fronting Adams Row, will be demolished and a six-storey building will be erected. This will be a steel-framed structure with a black-silicate cladding and stone-faced walls, supported on about 100 450mm diameter, eight-legged piles.

FAIRCLOUGH BUILDING has won two contracts for retail development in the North, with a combined value of £5m.

In Carlisle, Nottingham, the company is management contractor for a 5,000 sq metres super store for HMV. Completion is scheduled for November.

W. H. Smith & Sons has awarded Fairclough to build a 3,200 sq metre "Do-It-All" store in Merton, consisting of sales areas, offices and staff accommodation, part of the AMEC group, expected to complete in

CONSTRUCTION CONTRACTS

New headquarters for the Woolwich

At Bordon Heath, RALFOUR is to construct a headquarters for Woolwich Equitable Building Society under a £10.7m contract.

The four-storey building will provide 105,000 sq ft. The brick and stone-work elevations will include balustrades and there will be a restaurant, a gymnasium, an automated news shop and air conditioning. The contract, which is underway and will be completed in 24 months,

Balfour Beatty Construction has a contract from Anglian Water Authority for constructing a new outlet. This £1.5m order is for work at Southend-on-Sea and comprises a sewer outlet

1,800mm diameter and 1,200 metres long.

Balfour Beatty Building has a £2.9m contract from St. M. Health Care to build a 40-bed private hospital on the site of the White House in Tarperry Road, Streeton, Warrington. The hospital will be on two floors. The building will be steel-framed and clad in brickwork with a pitched slate roof. The contract includes electrical and mechanical services and landscaping, drainage and provisions for car parking. Work has started and completion is scheduled for mid-March 1988 in Shifnal, Balfour Beatty

has a contract worth 20.5m to complete the internal refurbishment of the Royal Revenue House. The additional works include a new floor in the building, wall and ceiling finishes, partitioning, entrance doors, sanitary fittings and electrical and mechanical supplies.

Balfour Beatty Construction International is joint venture with Balfour Beatty that has been awarded a contract to build the International Trade Centre in Bangkok, Thailand. The value of the project is 300m Baht (£5m) and comprises a concrete superstructure

on a six level underground car park. The client has specified a 'top-down' method of construction and 50-metre-deep diaphragm walls will be constructed for the basement area. The main structure will be supported by large-diameter bored piles. Both the diaphragm walls and piling works will be undertaken by Solefanche of France in joint venture with Stent Seaflo, the foundations division of Balfour Beatty. The programme for completion is 24 months.

Balfour Beatty is a BICC company.

Willett builds warehouses

WILLETT, a member of the Traders Group, has been awarded a £2.4m worth of contracts to construct a new office building for Traders House Developments. The brick-clad structure will have pre-cast floors and the contract includes some external works comprising block and block-pavement.

Industrial units at Wood Lane, White City, London W12, for Birmingham Developers, the first of which is due for completion in December. The second unit will be completed in January. The third unit will be completed in November, including an integral office area. At St Peters Street, Colchester, Essex, the company is to construct a

3,500 square metre steel-framed office building for Traders House Developments. The brick-clad structure will have pre-cast floors and the contract includes some external works comprising block and block-pavement.

For Traders House (Industrial) Developers, Willett is to build a new industrial unit worth £200,000 at Southgate Business Park, Fenlon Way, Hadleigh, Essex. The three units, which have a reinforced concrete and steel frame on piled foundations, are due for completion in January. A new wash and racing facility is to be built for Whitemarsh Developments at St Margaret's Road, Cheltenham, Gloucestershire, for £200,000.

Refurbishing St. Thomas's

HENRY FROST is to undertake major refurbishment of St. Thomas Hospital, London, by removing slatering, additions, refurbishment and construction to the hospital's North wing.

The project, worth £1.5m, is being constructed by John Laing Construction. Substructure work is now underway requiring about 400 750 mm concrete piles of depths up to 32 metres, plus a large number of 100-150 mm diameter piles. At Coprice Farm, Faw, Wallasey, Cemmentation is carrying out grouting of deep aid walls which will ensure safe ground conditions for construction of a housing development.

Over £5m housing orders

Building contracts totalling £5.5m have been won by WILDELLS GROUP, a subsidiary of the Traders Group, to construct a new 12-storey residential tower block worth £1.5m, at the Seldon Housing Trust, 38 Regent Street, Derby.

The company has also been awarded a £222,000 contract from the North East Housing Association to build a 10-storey block of flats in Cowley Street, Hartlepool, and a £17,000 contract from Erewash Borough Council for a family leisure centre.

In Nottingham, the company has been awarded an £8.5m contract to build a block of flats in St James' Well Road and the Nottingham Health Authority has placed a £94,000 contract for a Community Mental Health Centre.

Other projects include building phase II of Burlington Crescent in Nottingham, a £1.5m contract worth £1.5m to ALFRED McALPIN CONSTRUCTION LTD, to build seven blocks of eight industrial units and two blocks of light industrial units along in Chester. The warehouse slopes will be clad in Hoopé panels above a brick cavity wall.

The Scottish Metropolitan Property, Glasgow, has awarded a contract worth £4.5m to J. DONELON & CO. to construct a 55m contract by the Metropolitan Borough of St Helens to construct the main entrance to Asperton Street in the Mersey涤田 town. The project is due for completion in 1989.

The new BHS store in Mansfield, Nottinghamshire, is to be fitted out in 26 weeks by SHEPHERD CONSTRUCTION under a contract worth over £5m. Shepherd will carry out the complete fitting-out of the new store in Mansfield's Westgate. Work on site will begin this month.

Piling and ground engineering

CLEMENTATION PILING AND FOUNDATIONS, a Traders House company, has won £1m of work ranging from contracts worth just a few thousand pounds to contracts worth over £1m.

Contracts include all types of piling and ground engineering work with a complete UK geotechnical service.

Some of the highlights of the projects will make use of significant developments in ground engineering and piling techniques which result in substantial time and cost savings.

BEAUFORT HOUSE, Middlesex, is to undergo a new office block which will be constructed by main contractor, Bovis. The contract involves construction of piles ranging from 60 mm to 1.8 metre diameter using tripod, flight auger and large diameter piling rigs. In Stevenage, Hertfordshire, a shopping mall is being constructed by John Laing Construction. Substructure work is now underway requiring about 400 750 mm concrete piles of depths up to 32 metres, plus a large number of 100-150 mm diameter piles. At Coprice Farm, Faw, Wallasey, Cemmentation is carrying out grouting of deep aid walls which will ensure safe ground conditions for construction of a housing development.

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1986 RESULTS

	12 months to 31 December 1986	12 months to 31 December 1985
Turnover (port services)	\$150.3m	\$138.2m
Profit before tax	\$26.0m	\$17.2m
Earnings per share	22.4p	16.0p
Dividend per share	6.0p	5.0p

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SUMMARY OF THE STATEMENT BY SIR KEITH STUART, CHAIRMAN

PROFITS There was a further substantial improvement in profits and earnings per share. The dividend is increased by 20%.

PORTS Profits from port services were up from £13.2m to £20.3m before interest of £2.3m and after £3.7m severance costs. The benefits of recent investment in new port facilities are coming through.

PROPERTY Profits from property activities rose from £3.5m to £6.4m. We aim to increase the profit contribution from property both by redeveloping areas of land at the ports and by increasing property activity elsewhere. The recent acquisition of Grosvenor Square Properties has given a major boost to the Company's property development programme.

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And in this 1987 European Year of the Environment, Esso is taking firm steps to help achieve this goal.

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In fact, since mid-1986 we have already introduced a national network of over 100 strategically chosen sites selling Esso Unleaded.

For motorists, the changeover will probably raise more questions than answers, which is why we've produced this page.

Alternatively, pick up the Esso Unleaded leaflets, including our Service Station Site Directory, at your nearest Esso Station.

We hope you will find them helpful.

- Q** What is unleaded petrol?
A It is petrol to which no lead has been deliberately added.

2 **Q** Why is lead added to petrol?
A Small quantities of lead compounds can be added to petrol to increase its octane number. This allows the use of higher compression ratio engines with more ignition spark advance, which means improved engine efficiency and fuel economy. To replace lead we have to introduce more high octane compounds to compensate.

3 **Q** What is low lead petrol compared to unleaded?
A Low lead refers to the normal leaded petrol which is currently available. This is because the lead content was reduced in all petrol to 0.15g per litre on 1st January 1986 from its previous level of 0.40g per litre, in line with British Standard 4040. Unleaded petrol is allowed to contain up to 0.013g per litre which is why it cannot be called 'lead free', although on the Continent this term may be used where unleaded cannot be translated.

6 **Q** Where can I buy unleaded petrol?
A Esso were the first company in the UK to put unleaded on sale. And since then we have been increasing the number of our service stations that sell unleaded petrol. We now have more stations selling unleaded than all our competitors put together. For details of where you can buy Esso Unleaded please pick up a FREE copy of our latest site directory from any Esso station.

7 **Q** How will I know which pump dispenses unleaded petrol?
A Esso Unleaded pumps are clearly marked UNLEADED and will usually have a small pump nozzle and identification cover marked UNLEADED on the nozzle.

8 **Q** What happens if I inadvertently put the wrong fuel in my car?
A Given the safeguards mentioned above it would be very difficult for you to do so. However, an isolated incident may not be too serious. Unleaded petrol used in an engine designed to take leaded, or leaded petrol used in an unleaded engine, could

4 **Q** Can I use unleaded petrol in my car?
A The majority of cars in the United Kingdom have been designed to run on leaded petrol. However, nearly 40% of post-1985 petrol cars are now capable of running on unleaded fuel, although most will need some minor adjustments to allow this. Eventually all new petrol cars will incorporate the necessary modifications for them to run on unleaded. Before attempting to use unleaded petrol you should check first with your car dealer or motor manufacturer.

5 **Q** What is a catalytic converter?
A Although not legally required in the UK at present, a catalytic converter is a device that can be fitted to the exhaust system. When the exhaust fumes pass through the converter, emissions such as nitrogen oxide and carbon monoxide are burnt up or oxidised. Unfortunately, lead damages the catalysts, so they are only effective on cars already using unleaded petrol.

eventually cause damage to the engine.
9 **Q** What about other petrol fuelled equipment, like my lawn mower and chain saw?

A Some will operate successfully on unleaded. However, you should check with the manufacturer or dealer for specific advice and follow their recommendations.

10 **Q** For how long will leaded petrol continue to be available?
A Unleaded petrol will be phased in over a number of years. Therefore both leaded and unleaded will be available for a transition period which will be as long as the present product is required to supply today's cars.

11 **Q** What happens if I take my car to the Continent?
A Both leaded and unleaded petrol are available in Europe. There may be slight differences in unleaded to take account of local conditions, but this is unlikely to affect a car that can run on unleaded petrol.



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THE MONDAY PAGE



JOHN PLENDER

Reagan bonds may yet rescue the dollar

way to rationalise the market response to last week's attempt by the world's top finance ministers in Washington to stabilise the dollar.

The market's ambivalence underlines the fact that it is easier to talk the dollar down than to talk it into equilibrium, especially when there is an unusual degree of consensus among economists on some pretty mechanistic fundamentals. Broadly speaking, they feel that the dollar has fallen far enough to cause pain to the Germans and Japanese, but nowhere near enough to eradicate the US trade deficit. It follows that any agreement which rests on a joint assertion that currencies are broadly in line with economic fundamentals is no more than the house before a committee of whistlers to keep up your spirits. What, then, would

satisfy the markets?

The conventional answer was hinted at by Nigel Lawren, the British Chancellor, last Thursday when he said that "if you will the end of exchange rate stability, you also have to will the means."

In other words, governments must be seen to honour cooperative commitments to adjust their own fiscal and monetary policies so as to make a given currency alignable.

The trouble is that we have had a veritable fistful of unfriendly pronouncements on the US budget deficit and on fiscal discipline in West Germany and Japan. Indeed, it is surprising how anxious the financial markets have been to go on granting finance ministers a fair hearing. Henceforth the money men may take more convincing. Perhaps the most convincing gesture that

the US Treasury could offer—a real litmus test of the desire for longer-term stability—would be to put its money where its mouth is by issuing D-mark and yen denominated bonds.

It has been done before. In November 1978 President Carter announced a package of financing measures, these valued at around \$30bn, to shore up the plummeting dollar. An important component was the issue of D-mark bonds, which immediately came to be known as Carter bonds. With hindsight, two of the more striking things about the package were the superb timing by the US Treasury and the smallness of the trade deficit over which the markets were in a panic.

Given that precedent, the psychological significance of

an issue of Reagan bonds would be immense. At present the United States is the world's biggest debtor, with a mountain of debt that will approach \$1,000bn by the end of this decade. Unlike other countries, this potential trillion-dollar debt is borrowing in its own currency, so when US Treasury Secretary James Baker talks down the dollar, he is reducing the value of US obligations in foreign hands.

Any move to raise very large sums in D-marks and yen would imply that further dollar devaluation could not be engineered without inflicting a painful increase in debt servicing costs and in the value of the ultimate obligation to repay. If the dollar ceased to fall, the US Treasury would be able to finance its own deficit more

cheaply because D-mark and yen interest rates are lower than American rates.

There are wider reasons for bringing about a shift in the composition of credit from domestic dollars to foreign currency in a period when the emphasis of US economic growth is changing from domestic demand to exports. The servicing of currency debt issues by the Treasury would provide a regular buyer for US exporters' foreign exchange earnings. And as Edward Guay, chief economist of Cigna Corporation, has pointed out, currency financing would contribute to a modest reduction in the worldwide over-emphasis on the dollar as a credit vehicle.

He adds that it would also permit the Federal Reserve to slow the growth of broad money in the US without causing

liquidity pressures, while simultaneously mopping up some of the excess liquidity that is pumping the Tokyo stock market into a 1929-style frenzy.

West Germany and Japan would probably not object to a little help from America in managing their own liquidity surpluses; the Germans, in particular, have always made a fetish of sound money as they continue to fight the anti-inflationary battles of the 1980s. More important, their private investors have sustained substantial losses on dollar portfolios, as they pile up dollar reserves in the attempt to prevent their currencies appreciating still more against the dollar.

The more weighty obstacle probably lies in the White House. For while President

Reagan no longer appears to believe that the US can walk tall in the world without a strong dollar, the prospect of following in President Carter's footsteps at the dog end of an increasingly troubled presidency must be singularly unattractive. There is already an awful political symmetry in the way both men came undone in their handling of the economy. To add an economic dimension by issuing Reagan bonds would be seen as doubly humiliating.

This does not mean that it will never happen. At some stage the option may look more appealing than a Draconian hike in interest rates if the dollar goes into a tail-spin. That will be the time to put money on a durable currency accord.

INTERVIEW

Never a foot in touch

Hugh Carnegy talks to former rugby star Tony O'Reilly

THERE is a great danger, if you are at all interested in the game, that an interview with Dr Anthony J. F. O'Reilly or plain Tony O'Reilly as he is everywhere known in his native Ireland—will be about nothing else but rugby football.

Never mind his remarkable ascent to the top of the American food company H. J. Heinz and his transformation of its fortunes. Forget his intense style of management and his keen eye for a market.

His thoughts on corporate affairs in the US and Europe, on the food industry worldwide and on the travails of his homeland can wait. Instead, sit back and enjoy a few humorous tales from his days as an international rugby wing three-quarter for Ireland and the British Lions.

Question Whose international rugby career spanned three decades? Answer Tony O'Reilly, capped in the 50s, 60s and 70s. Thereby hangs a tail, of course. His last game for Ireland was against England at Twickenham in 1970, a game recall at the age of 30. Already managing director of Heinz UK, it was celebrated for his arrival at training in a chauffeur-driven limousine and the headline "Heinz means hax beans."

Towards the end of the game—which England won—O'Reilly found himself the last line of defence. "I had to do something I had avoided doing for my entire career which is dive on the ball. So I dive on the ball and receive what centuries of Irishmen received from passing the ball to the head. I come to after 30 seconds or so and I can hear this great cacophony of sound. Out of it, quite clearly, comes one Irish voice shouting: 'And kick his bloody chauffeur while you're at it.'

He returns to Castlemartin, his handsome early 18th-century manor house in County Kildare, for as many Ireland matches as he can.

But out of Castlemartin's glazed-front breakfast room, the early morning mist is lifting from the River Liffey and the conversation must move on.

A few weeks ago, O'Reilly was appointed chairman of H. J. Heinz company following the death of Henry J. Heinz II. He is the first person outside the Heinz family to hold the post in the company's 117-year history



and he assumes it in addition to his positions as president and chief executive officer.

He was made chief executive in 1973, two years after moving to the company's Pittsburgh headquarters and just four years after joining Heinz as managing director of the UK operation. Prior to that he had served as head of the Irish Sugar Company and the Irish dairy board, Bord Bia, for whom he launched the highly successful Kerrgold butter.

Kerrgold is regarded as an early success for O'Reilly's marketing skills. There is now twice as much Kerrgold butter in Ireland as there was since 1978 when the marketing budget has risen eight times to £30m.

PERSONAL FILE

1952 Won first of 29 rugby caps for Ireland and 10 British Lions

1961 Joined Irish Dairy Board

1962 Married Susan Cameron, three sons, three daughters

1963 Managing director, Irish Sugar Company

1969 Managing Director, Heinz UK

1971 Senior vice president Heinz North America and Pacific

1972 Executive vice president and chief operating officer, H. J. Heinz Co.

1973 President and chief executive officer, H. J. Heinz

1987 Chairman H. J. Heinz

a year. It has helped Heinz become one of the top three performers in the food industry.

It has been done by strengthening the old faiths of ketchup, baked beans and soups and expanding into baby food, cat food — "the number of cats in the US is in excess of 50m so the pet food business is the fastest growing sector of the grocery business," he says—and especially health foods.

He chuckles at this conclusion, but later retracts it in favour of what he calls the infusion of "controlled tension" in the marketplace.

"And the way you control the tension is by performance. It's very like football. You'd better perform and you'd better play well, not just last Saturday but next Thursday. That's the expectation of the United States. Every quarter, every half-year, every year."

His system at Heinz of binding managers' rewards tightly to performance and stock options is framed by this. "You don't get a lot of money for just turning up for work . . .

I believe there should be symmetry between the shareholders in the company and the management. They should prosper together or suffer together." His top managers earn between \$800,000 and \$900,000 a year and each have Heinz stock worth more than 15 times that — "rather decent," says O'Reilly.

O'Reilly's belief in management is not denied by affairs such as the scandal which erupted last year involving Allegheny International, the Pittsburgh company which he serves as a non-executive director.

The US Securities and Exchange Commission is investigating Allegheny to determine whether the company violated shareholders' rights by failing to disclose various transactions and the scope of executive compensation and perks. This followed the removal of the chief executive, Robert Buckley, amid allegations of personal misuse of company funds by certain top executives and their families at a time when Allegheny was losing money.

O'Reilly says the affair showed there are limits to the power of outside directors which are limits of their responsibility. "It's a mixture of your own personal integrity and the service and commitment of other people. It's not a question of who is right or wrong, it's a question of what is a symptom of a weak or corrupt system."

Allegheny is an example where the outside directors became uneasy with the direction the company was taking, dismissed the chief executive and later retracted it in favour of what he calls the infusion of "controlled tension" in the marketplace.

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He is critical of investment policy and—naturally—the lack of effective marketing of Irish products. Kerrgold butter was a benchmark not emulated. "We need more marques like Waterford Glass, Baileys Irish Cream and Guinness and so on. We've got to do something that is magical and not just attract something which next week can be attracted to Taiwan or Singapore."

The case revives the hoary argument whether a jury is the appropriate mode of trial for libel actions. When Juicy trial, which did not set out to prove the Soviet subsidy, nevertheless believes that it is true that To Eithnos is the mouthpiece of Soviet propaganda.

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Time to curtail libel replays



December. He asserted that the public view that it was preposterous of judges to think that they could decide complicated and sensitive issues of fact better than juries was "romantic twaddle."

The Faulks committee agreed. The article alleged that To Eithnos had received Soviet subsidies, which was interpreted as meaning that the Greek newspaper was the willing tool of the Soviet Union's propaganda machine. The Eithnos trial, which did not set out to prove the Soviet subsidy, nevertheless believes that it is true that To Eithnos is the mouthpiece of Soviet propaganda.

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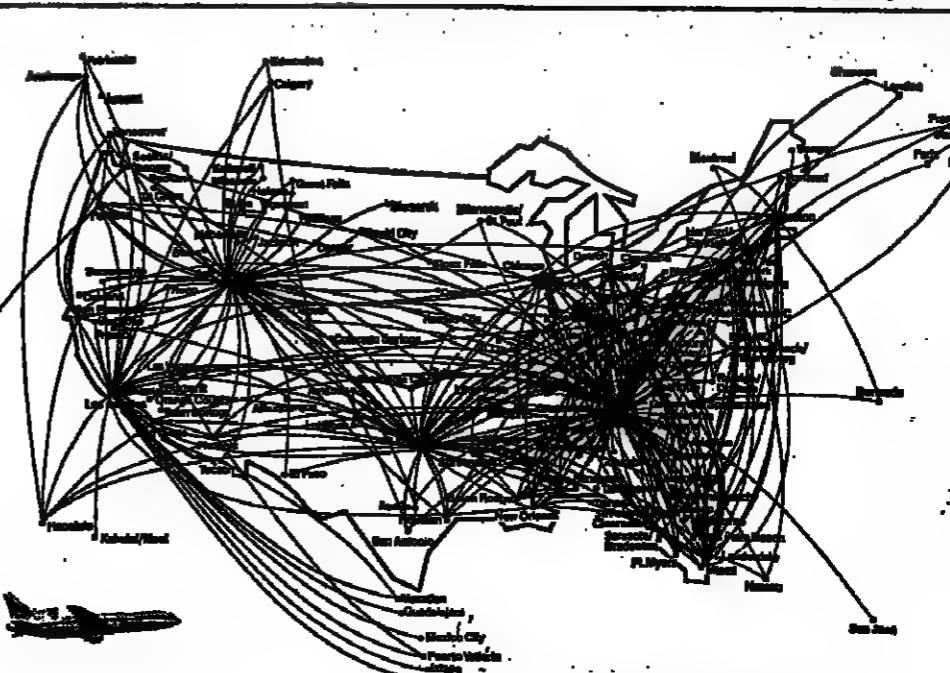
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THE ARTS

Don Giovanni/Coliseum

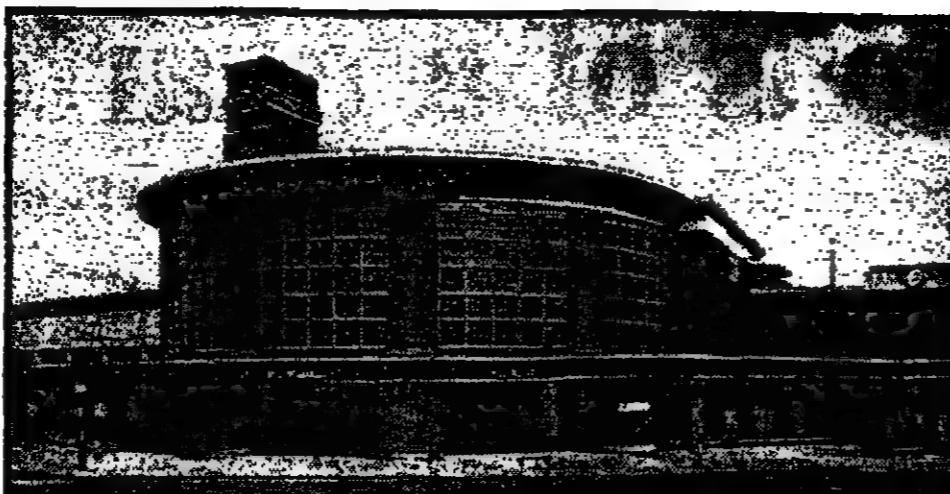
Rodney Milnes

Reviewers of opera, it is sometimes said, write too much about production and too little about music. Not so today. Jonathan Miller's lively staging of Mozart's opera, welcomed by Max Lopert when it was new 15 months ago, has been most efficiently revived by Karen Stoen: last Saturday's performance fizzed along with steady gathering momentum.

The fact that it ran for under three hours including a substantial interval cannot simply be accounted for by the omission of "Il mio tesoro" on, I should have thought, dubious historical grounds. No, the conductor was Roger Norrington, and his style of direction was governed by "contemporary performance practice". Many people maintain in conversation that in the 18th century two-in-a-bar Andante meant "fast". Here the theory was firmly put into practice.

In the first part of the overture, taken at about twice the speed, the series on dates and fables could definitely signalised names, linking at Giovanni's ankles, kicking at the steadily, horror-movie approach of unspecified nastiness. Similarly, the duet at the dinner-table (with marvellously contained trombone tone) was less a dress rehearsal for the last judgment than an intensely dramatic confrontation between the protagonist and the corpse of his wife. He had just murdered her which respect it fitted well with Dr Miller's ideas.

The Catalogue aria started as a patter song and ended as an easily-flowing folk dance. "La ci darem" was no romantic seduction, but a point number (in which respect it fitted well with the Holders' translation). Each tempo made you sit up and think (even the traditional one in relation to the others); in most cases after moments of hesitation. If not shock, you thought yes, of course, that's how it should go. But did the brisk clip for the trio at the Commendatore's death carry enough weight? Was there enough danger lurking in the first act quartet, or did the forward motion suggest sufficient



Chiswick Park is one of the best Tube stations of the 1930s: luckily it is listed and so may escape the deprivations of London Transport's designers and "improvers".

Architecture/Colin Amery

Tube design has hit the buffers

Anyone who travels even a few yards on the London Underground system will have noticed that it is in a constant state of what has come to be called refurbishment. Nobody would deny that the whole system has become grubby and neglected; the fundamental design of the stations and trains was of a good, indeed a high

order. In a decidedly un-English way the design ran through everything: the buses, the bus stops, the ticket boxes, the clear and distinctive marks of well-thought-out design. In the suburbs the Tube stations of the 1930s stood out like beacons of rationality amidst the world of the bogus Tudor and feeble neo-Georgian.

Anyone who cares for high design standards and the appearance of the public realm has a duty to be concerned about what is happening to the capital's underground railway. The pattern-work was needed for the few moments of hesitation. If not shock, you thought yes, of course, that's how it should go. But did the brisk clip for the trio at the Commendatore's death carry enough weight? Was there enough danger lurking in the first act quartet, or did the forward motion suggest sufficient

Atalanta/Bloomsbury

Dominic Gill

Atalanta is the Götterdämmerung of the American composer Robert Ashley's idiosyncratic brand of musical performance-theatre: an "opera" (almost any other genre on title will do) divided into three episodes which together last nearly seven hours. Although every new performance amounts to a new "version", I understand that the British premiere presented by the Canopus Festival last week did not differ substantially from the original version devised for Chicago two years ago. The same stage set, populated chiefly by shop-window mannequins, remains unchanged throughout the work: the four live performers take up their positions among the mannequins at the start of the first evening, two stand at the rear of the stage, two seated at the front from which they never deviate thereafter.

Both the subject-matter, which is indeterminate, and its delivery are dreamlike, static surreal: a sequence of wary, stoned anecdotes commented on and fancies, sometimes spoken, occasionally sung, but for the most part delivered in the halting fragmented mode of speech. A half-way between a narrative and a kind of sleepy Sprechgesang with all the emphases in the wrong places, of someone who has just woken from deep narcosis.

After the first evening, my colleagues on The Independent characterised the time (if there is a time) and the place (it

is a place) of Atalanta nicely in his review: it is permanently there in the morning, in Ashley's dreamlike basement club in the middle of nowhere. By the end of the third evening, the time was nearer five in the morning, and the high was beginning to wear distinctly thin.

If Atalanta had not been so long, and so pretentious, it might have carried the day with a certain airy charm. But it pretended far too much that it was not, by its very length, pretentious to grandness when its scope was patently trivial and its theatrical vision no more than myopic; to profitability, when its treatment of every theme was demonstrably superficial and scatty; to novelty, when nearly every tool it used was bland.

Performance groups like our own Vocem, or even non-musical groups like Anthony Howell's Theatre of Mistakes achieve more in a tenth of the time; Laurence Anderson's more articulate and direct "Theatres" at Ashley tries to say in two hours, and with a keener cutting edge. If there was any heat, it was the music. "Eine Tyrannie" solo keyboards are always good; Paul Schorn's 112 mixing and orchestral electronics were professional. Whenever their work came into the foreground, one could shake off the narcosis and sit up, for a brief minute, wide awake.

There is no doubt that the greatest influence on the system was Frank Pick—one of the

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Arts Guide

Music

LONDON

Philharmonic Orchestra conducted by Esa-Pekka Salonen with Cho-Liang Lin, violin. Lubotzky, Bruch and Shostak. Royal Festival Hall (Mon. 10.30pm).

Royal Philharmonic Orchestra conducted by Paavo Berglund with Horacio Gutierrez, piano. Elgar, Rachmaninov and Beethoven. Royal Festival Hall (Tue.).

London Mozart Players conducted by Jane Glover with John Eliot Gardiner, Mendelssohn, Beethoven, Prokofiev and Mozart. Barbican Hall (Tue.). (638 8821).

HRC Symphony Orchestra conducted by Dennis Russel Davies with Alfred Brendel, piano. Ravel, Schubert and Ravel. Royal Festival Hall (Wed.).

Royal Philharmonic Orchestra conducted by Paavo Berglund with Boris Belkin, violin. Strauss, Tchaikovsky and Sibelius. Royal Festival Hall (Thu.).

TOKYO

Tokyo Symphony Orchestra conducted by Piotr Iljitsch, piano. Bruno Leoni, violin. Brahms, Dukas and Debussy. Tokyo, Bankei Kikan (Mon.) (575 0191).

Mirella Freni, soprano. Paolo Mattioli, piano. Debussy, Dukas and Brahms. NHK Hall (Wed., Thur.). (465 1785).

PARIS

Mirella Freni, soprano. Paolo Mattioli, piano. Debussy, Dukas and Brahms. NHK Hall (Wed., Thur.). (465 1785).

Maria Jose Phares, piano. Jerome Granjon, piano. Novello Orchestra. Philharmonie de Radio France conducted by Olivier Charpentier Bach-Mozart (Mon. 8.30 pm). TMP-Chatelet (01 4223 4444).

Erasme Orchestra of Paris' soloist Debussy, Ravel, Monique (Tue.). Auditorium des Halles, 5 Porte Saint-Eustache (052 0773).

Herve Lamy and Jean Bulliard, tenor. Coopera's Leoncavallo (Wed.). Saint-Roch Church (01 42 50 50 50).

Groupe Vocal de France conducted by Helmut Franz. Michel Zier, Emmanuel Nunes (Wed.). Radio France, Studio 100 (032 1516).

Novel Orchestre Philharmonique, Radio France choir and Matilde Pouchelli's La Gioconda (Thu.). Salle Pleyel (032 02 02 02).

TOKYO

Tokyo Symphony Orchestra conducted by Gerard Schwartz with Carol Rosenberg, piano and Delhi Jones, mezzo-soprano. Chaikovskii, Falla and Bartók. Barbican Hall (Thu.).

Mirella Freni, soprano. Paolo Mattioli, piano. Debussy, Dukas and Brahms. NHK Hall (Wed., Thur.). (465 1785).

NY

NHK Symphony Orchestra conducted by Leonard Slatkin with Haydn, Tchaikovsky, All-Russian and Brahms (Thu.). (465 1785).

NIKKI COOPER (IBM Gallery); John and Singers Vocal Quartet. Mixed

Saturday Hall, Akasaka, Placido Domingo with Tokyo Symphony Orchestra conducted by Eugene Kohn. Popular open airrias of Donizetti, Verdi, Puccini (Mon. Wed.). NHK Concert Hall, Shinjuku (03 33 01 51). (Wed.).

Traditional Japanese music. Ensemble of koto, shamisen and shakuhachi by Kozo Kamayama. Works include Nightingales at the Palace and Ocean Currents. ABC Hall, Shinjuku Park (Tue.).

Tetsu Nakata Concert. Works for shakuhachi and shamisen also included. Three Themes of Spring. Tickets for Japanese Instruments etc. (Wed.). (Asahi Salmon Hall, Shinjuku Park (Wed.).

New York Philharmonic (Avery Fisher Hall). Leonard Bernstein conducting. All-works programme (Tue.). Leonard Bernstein conducting. Haydn, Beethoven (Wed.). Bernstein, Domingo, Lucia, Wigand, soprano. Westminster Choir directed by Joseph Flummerfelt (Thur.). Lincoln Center (021 587 5222).

VIENNA

Mary Bergari, Pamela Mitchell, Inder, Jon Ron, piano. Wagner, Brahms, Schubert, Schumann, Mendelssohn, Seal (01 52 51). (Wed.).

François-Xavier, piano. Schubert, Ravel, Chopin. Paloma Parry (01 52 61). (Thu.).

WASHINGTON

National Symphony (Concert Hall). Charles Zukerman conducting and violin. Schubert, Prokofiev, Beethoven (Thur.). Kennedy Center (020 227 2777).

CINCINNATI

Cincinnati Symphony (Orchestra Hall). Leonard Slatkin conducting. Haydn, Tchaikovsky, All-Russian and Brahms (Thu.). (465 0111).

The Münster Ensemble (Orchestra Hall). Bruckner, Stravinsky, King, Elert, Brahms (Mon. 5.45).

Antony and Cleopatra/Olivier

Michael Coveney

This is easily the most satisfying *Antony and Cleopatra* I have seen. Peter Hall's National Theatre revival is virtually uncut and plays for four hours with a long interval. The use of the Olivier amphitheatre is masterful—the great play laid out with cinematic fluidity against a curved back wall designed by Alison Chitty, broken up with thrilling drum sounds and descents on the stage through the stalls.

But this is no mere florid pageant. The range of this play's scale also seems to play a part: empire vs. empire; production vs. empire falls in the Mediterranean theatres of war; so a love affair dwindles in its shadow. The matching of Judi Dench with Anthony Hopkins proves a triumphant solution to the problem of uniting a failing, middle-aged affair, charged with great detail and intimacy, still capable of encompassing the scene of Ventidius' revenge of Crassus pronounced over the dead Parcurs.

Cleopatra is not a familiar weapon in Judi Dench's armoury, notwithstanding her lascivious Sally Bowles of 20 years ago. But her Cleopatra is that of aaged beast. Hopkins yields life with a reluctant shrug and is immensely moving as she watches him losing that grip.

Hopkins' pig-like and massive head appears to be twice as big as anyone else's—is a somnambulant warrior with a delayed cackling laughter and a strange ridiculousness in his early tumbles in Egypt. He reserves a distance still from her, raising his hand at the end to define old Nile as "a hogger."

The panoply of war is not shown in blood and thunder, but clearly presented with a great variety of staging manoeuvres and a great patience with nooks and crannies one had hardly noticed before, for instance the scene of Ventidius' revenge of Crassus pronounced over the dead Parcurs.

The death of Antony is that of aaged beast. Hopkins yields life with a reluctant shrug and is immensely moving as he is

winch in a net to the moment. The design is a little ungainly here, but the acting sees us through. Dench's persistence gives way to a savage resentment on "Withered is the garland of the war" and the fifth act becomes a riveting emotional journey from tragic self-pity to the ecstatic embrace of death in marmoreal splendour. I have never seen a Cleopatra take so much joy in the worm, and she is carried out feet first in the show's final procession of all.

Tim Pigott-Smith is a vivid, leering Octavius transfigured in the chill blue of Rome after the luxuriant Egyptian browns and oranges, though Stephen Wentworth's lighting is over-endowed with impudent shadows. This is a marvellous performance and it sets the standard for the rest of a very strong and well-knit cast. Mr Bryan's Enobarbus gives his great despatch in laconic clarity, his much-mocked overtones with special remembrance; John Bluthal is a jovial Lepidus and the rustic fellow with the worms; Sally Dexter is a suppressed Octavia, white-faced with fury; David Schofield a lethally impetuous Pompey.

The Magic Flute/Congress, Eastbourne

Ronald Crichton

Kent Opera's Magic Flute drew a large audience to the Congress Theatre at Eastbourne last Tuesday at the start of the second leg of the spring tour. What is more, the public was clearly happy and, by the standards of this mid-sized town, warmly enthusiastic. Yet for those who care about opera it was a sad occasion.

Norman Platt, Kent Opera's artistic director, came before the curtain to plead urgently for money and support. For this admirable production as it is that we need any consolation; otherwise it is that of a lesser quality than the present designs that he is

Sir Nikolaus Pevsner wrote of London Transport that it "was the most efficacious centre of visual education in England." He was right. The heirs of Frank Pick would do well to study the proposals made in this excellent report.

They are not a conservationist squeal but an intelligent, sensible and reasonable set of proposals for keeping and enhancing the best of the recent past. Most of what is recommended will not cost as much as the dreadful tear-up that is going on.

Londoners are, in fact, proud of their Tube. They do not like what is happening to it. It is sad that a once pioneering organisation with the highest standards should have fallen for image-making that looks cheap and now will look worse in a few years' time. Why spend such money making up when there are such good bones underneath?

The Tourist Guide/Almeida

Michael Coveney

Glenda Jackson's West End version of Botho Strauß's Gross und Klein four years ago was the British theatre's first and so far only attempt to accommodate one of West Germany's leading playwrights.

The attempt was unjustly reviled by those who had seen Peter Stein's original production, but we all have another chance to meet this extraordinary poet of drama and private life. The production that follows is a triumph of the art of the stage.

Whereas the Jackson Great and Small cut corners, the whole successfully, to make Strauß comprehensible in English terms. Pierre Audi's production is severely committed to Teutonic heaviness and angst. The playing of Paul Freeman and Tilda Swinton is bravely uncompromising, though it is not without its moments of cringe and cringe and warmth of her coquettish devotee, Kristine, Vassili's new Elizabethan Penny-farthing finance and building are two aspects

of the deeper intricacies of the work were largely missing. They were missing too from the brisk conducting of Ivan Fischer, bright as a toybox but not relaxed or mellow.

parent triptych for Martin's apartment and a fine array of rough-hewn exterior gables — representing stone, sky and cottage — that are compelling artefacts in themselves.

The effect is of exposed nerves, strangeness, impending catastrophe, a mood taken up on Oliver Knussen's sound-track of tremendous strings, inquisitive piano and overlapping voices, dial a half-way through, the hilarious appearance of two lady tourists wandering around the ruins as Kristine, Vassili's new dead, craven sex and warmth of her coquettish devotee, Kristine, is the play's one flash of unrestrained normality.

Mr Freeman is an impressive and commanding foil to a remarkable performance of consummate extravagance by Ms Swinton, a crane-like singer girl whose face seems to be indefinitely stained and sodden with tears of delight, fear and disappointment.

Saleroom/Anthony Thorne

Cricket, lovely cricket

The sale of the week (or the millennium) if you are a cricket fan is curved to suit a left-hander. It carries its auctioneer's name, Tom Edwards, and should make at least £1,000. Three rare 19th century bats will be cheaper. There are many bats signed by the great and since cricket thrives on quaintness, there will surely be a buyer for the ball with which E. R. Wilson took 10 for 81 when playing for the MCC in that needle match against North Argentina in March 1912, playing away.

There are photographs galore, including the first class county captains of 1900, the Australian team of 1902, and W. G. Grace at 50. There are ceramics and ephemera, paintings and score-cards, books and "Plum" Warner's shorts. The catalogue alone will keep the fanatic quiet for hours.

Sobey's now sells sporting guns in its Sussex saleroom and on Wednesday offers a Purdey "live pigeon" competition gun. The sport of live pigeon shooting, which began in the early 19th century, was the forerunner of clay pigeon shooting. It was a competitive sport, with much shooting and special competition grounds. London pigeons are believed to descend from the "old" that got away. The gun is late, dating from 1885, and carries a top estimate of £5,000.

FINANCIAL TIMES

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Monday April 13 1987

The perils of Japan-bashing

A MEMBER of the Nakasone Cabinet complained last week that Japan had been forced to sit in the defendant's chair during the Washington meeting of Finance Ministers and central bankers. Meanwhile, the Americans are about to retaliate against Japan's alleged failure to abide by last year's semi-annual trade agreement.

The UK is threatening to restrict Japanese access to the London financial market, if British firms are not promptly allowed to join the Tokyo Stock Exchange. No doubt other countries will join in the fun. But, before Japan-bashing gets out of control, it is worth asking whether the attacks are being directed at the right targets.

It is important to distinguish between Japan's trade surplus as a whole and the existence of protective barriers within specific industries. Since the late 1960s, Japan has tended to generate a large current account surplus. It has relied too much on exports for its growth. This tendency has been aggravated in the last few years by events in the US—the budget deficit, the rise in the dollar, and the growing trade deficit, which has been partly financed by capital inflows from Japan.

Japan's over-dependence on exports and the US deficits reflect the choice of macroeconomic policies in the two countries. It is these policies that have to be changed, if the imbalances are to be corrected in the US. The budget deficit is crucial. In Japan, the shift to domestically generated growth requires changes in fiscal policy and in other areas including land use, housing finance and deregulation.

Japan's export success has provoked a strong reaction in the West. This often takes the form of bilateral deals, imposing curbs on particular exports or gaining access in Japan for products or services in which the Western country regards itself as competitive. These external measures do little in themselves to affect the trade surplus. Any cuts in Japanese exports which may result will be offset by higher exports of other products.

High costs

Moreover, to the extent that some parts of the Japanese economy are shielded from foreign competition, this imposes a cost. Japan is less competitive than it otherwise would be. The country would benefit if imports of farm products were liberalised. Certainly, there would be opportunities for foreign suppliers, but costs

in the Japanese economy as a whole would be lower.

There are other areas—especially services, such as transport, distribution, telecommunications and finance—where costs are high compared to the largely unprotected manufacturing sector. Thus, the entry of Cable and Wireless is likely to stimulate competition in telecommunications and improve the quality of service. As in agriculture, special interest groups would suffer but the economy would be more competitive.

Closed sectors

Western countries have a legitimate interest in the re-orientation of the Japanese economy towards domestic growth, and in the removal of specific barriers which妨碍 the entry of foreign firms. They are justified in exerting pressure to achieve these changes. But they need to think tactfully about tactics and objectives.

Non-tariff barriers are confined to certain branches of the Japanese economy and even there they are not markedly worse than those of other countries.

(How much access does Cable and Wireless have in Germany and France?) Thus, it is quite wrong for British business to link the UK's bilateral deficit with Japan's Japanese protectionism, or to assume that the way to reduce the deficit is by prising open the closed sectors through the kind of retaliation threatened in the 1982 Budget measures.

The All-Share Index is easily calculated (nowadays computer-minute) and is a sensitive indicator of the short-term mood of the market. But its unweighted geometrical construction makes it an inappropriate measure of long-term performance. For that purpose, the weighted arithmetical structure of the FT-Actuaries series is essential.

The point can be illustrated simply enough. On the base date of the FT-Actuaries Index, the All-Share Index stood at 1,000. Last Friday it stood at 1,521.8. And so has multiplied just five times compared with the All-Share's near constant appreciation.

Supervise the All-Share's rise looks spectacular. So does the increase in value of the stocks it represents. In April 1982 the 584 companies whose shares were included were capitalised at £18.3bn.

For comparison, the latest quarterly valuation at the end of March revealed a total capitalisation of £206bn for 725 companies.

Of course, the rapid inflation of the past 20 years must be set against the index figures can make any genuine sense. In purchasing power the pound is worth not much more than 13 per cent of its 1962 level.

Viewed in real terms the All-

Share Index enjoyed its best performance on Sunday from a real base of 100 in 1962. It reached around 144 by May 1972. That has proved an unrepeatable pinnacle. For comparison the All-Share's recent nominal peak of 1,026.58, touched on March 24, represented about 141 in real

terms.

So over 25 years the annualised real capital growth has been a modest 1.4 per cent. But that is not the whole story because in addition the dividend yield has averaged some 6 per cent.

Therefore the total real return on equities has been perhaps 6% per cent a year, enough to keep a pension fund actuary contented (though a taxpaying private investor may be less so).

Within the overall performance, of course, are concealed some very great divergences by individual sectors. Some of these are only to be expected, such as the lacklustre showing of engineering and motors, reflecting the decline of these traditional industries.

But we would have expected that the very best sector performance would have been produced by Publishing and Printing (originally Newspapers and Publishing) which has recently topped 3,500! For a sector once notorious for bad management this is quite a coup.

Another odd result is that the Merchant Banks sector supposedly representing one of the UK's most internationally competitive industries, is only just away from realising the bubbly price, with a current index number of around 365.

A full league table of leaders and laggards among the sectors over 25 years is not practicable. There have been many sectoral changes over the years, because the series of indices was designed from the beginning to be flexible.

In the event, some 21 of the original 36 individual sectors have survived in a reasonably recognisable form. Industrial



Share Index enjoyed its best performance on Sunday from a real base of 100 in 1962. It reached around 144 by May 1972. That has proved an unrepeatable pinnacle. For comparison the All-Share's recent nominal peak of 1,026.58, touched on March 24, represented about 141 in real

terms.

As for the prominent newcomers, Agencies represents some of the new growth areas of the service economy. Telephone Networks is a product of privatisation and Conglomerates was devised as a home for some of the powerful financially based combines which have become prominent during the past 20 years.

The overall balance of the major groups has not altered dramatically, however. As a proportion of total capitalisation it has fallen only from 17.2% to 16.5% per cent over 25 years, while Financials, Services and Manufacturing have slipped from 30% to 21% per cent, mainly because composite insurance shares have performed so badly.

Elsewhere the Oil sector has grown from 6.7 to 11.7 per cent (it was once proportionately much bigger still, even without British Gas) and the newest sectors, especially Telephone Networks with over 5 per cent now have a significant weighting.

Although the All-Share's weighted arithmetic structure has entirely fulfilled its theoretical objectives, one of

two controversies about other aspects of the index have persisted in recent years.

One is the so-called "IP effect" which arises because the whole of the equity capital of each constituent company is used in the calculation of the

index.

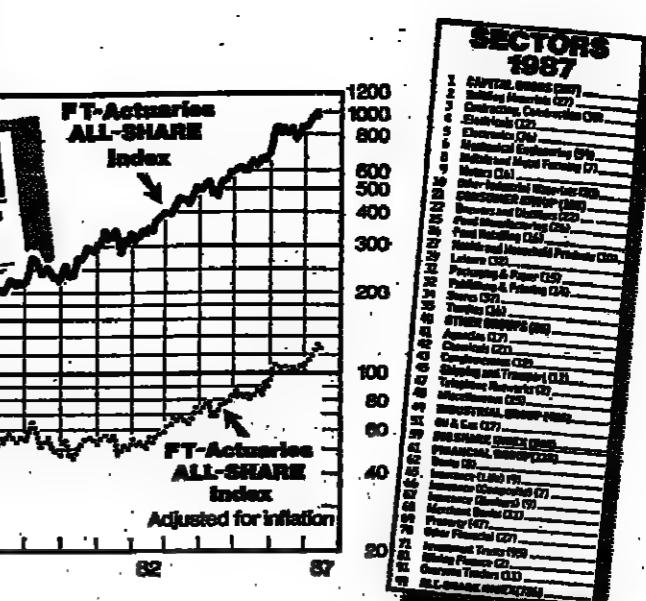
The actuarial committee which controls the indices has argued consistently that the whole of a company's issued capital is at least potentially available to the market. But portfolio managers have protested that in practice large blocks may be locked away out of reach and should not be included in an index which is designed to track actual portfolio performance.

For many years around half of BP's equity was owned by the state.

Because of BP's very large market capitalisation the consequent underweight representation of BP in most actual institutional portfolios compared to its weighting in the All-Share Index led to noticeable underperformance at times when BP itself performed strongly.

Of course, when the BP share price was relatively weak, fund managers tended to outperform, and in those circumstances, oddly enough their protest was less vociferous.

The other controversy, known by the IP-effect, when fund managers found themselves



and British Gas' fortunes improved performance handily of about 0.2 per cent each. The rest appears to relate largely to extra performance achieved by smaller companies' stocks, which underlines the value of having a broadly based index.

The very smallest companies are not in the index, but it does include hundreds of medium-size constituents and covers well over 90 per cent of the overall capitalisation of the UK equity market.

The All-Share Index's 25th birthday comes after a period of

ECONOMIC VIEWPOINT

The real dollar argument

By Samuel Brittan

DO THE Americans sincerely want to save the dollar; and are other countries prepared to play their part in a co-operative effort?

If governments and central banks are determined to stabilise the pattern of parities, they can do so. Not by intervention alone, which has never worked without other policies. The requirement is that monetary policies be directed to the exchange rate and the consequences for other variables — inflation, output and so on — be taken on the chin.

What these exact consequences will depend on how the task is shared between the key central banks. Should the main burden be on the US to tighten monetary policy, when the dollar is under strain, or on West Germany and Japan to reduce their interest rates and encourage others into the same?

The main doubt lies not in the ability of national authorities to maintain roughly the present exchange rates, but in their willingness to do so when it clashes with other objectives.

From the first Plaza meeting of September 1985 onwards, the central banks have been notably more sceptical about the stabilisation exercise than the Finance Ministers, not so much because of their superior wisdom but because they like having their hands tied in monetary policy.

Yet amid the scepticism with which the financial world greeted the generalities of the Group of Five, one important statement by the head of one central bank, Paul Volcker of the Fed, no less, taking a step towards an exchange rate-based policy, did not receive enough attention.

Testifying to a Senate sub-committee on April 7, Mr Volcker, after pointing out that intervention was "a limited tool" and calling for "a reduction in the US Budget deficit and fiscal stimulus abroad," then went on to say:

The conduct of monetary policy, here and abroad, will be relevant as well. The performance of the dollar in the exchange market will affect both a nation's bearing on our provision of reserves. I should think our central banking colleagues abroad may wish to take account of such circumstances as well.

Key US indicators

	(per cent of GNP)			
	Federal savings	Other savings	Net investment	Current account deficit
1971-1980	-1.8	8.8	6.7	-0.2
1981	-2.1	7.8	5.5	-0.3
1982	-4.6	6.6	2.0	0.0
1983	-5.2	7.1	3.1	1.0
1984	-4.5	8.7	6.6	2.4
1985	-4.9	7.8	5.6	2.9
1986	-5.0	7.6	5.7	3.1

Source: L. H. Summers, Testimony for House Budget Committee, Feb 4, 1987

This is a notable departure given the Fed's past reluctance to elevate the exchange rate into a main determinant of monetary policy. The words have been accompanied by some slight hardening of policy and one or two rate base rate increases, as well as a rise in US long-term rates to above 8 per cent brought about independently by the bond market.

The Volcker quotation does not, of course, settle the matter. Although recent talk in the US of lower interest rates has gone completely into reverse, we do not know the Fed's precise trade-off between a stable dollar and domestic objectives. Nor may the Fed until it has seen the outcome of the present debate.

We do not know if Mr Volcker will be re-appointed by an administration still addicted to growthmanship.

The Baker statement goes, however, to bring to light a difference in the degree of fragility in the Group of Five accord on the dollar's relationship and on that between the dollar and European currencies.

While the latter has some right left in it, the future of the dollar-euro accord looks quite uncertain, even now that it has been relaxed around its new central point of \$1.40 to the dollar in place of \$1.54.

Indeed, the West German authorities seem quite unsure of what to do. They see the yen rise, which gives German industry the benefit of some depreciation against Japan.

The German Federal Republic seems to get off far too lightly at these international gatherings. If there is an economy that is undershooting, even by the most rigorous sound money standards, it is the US.

On IMF forecasts German growth will drop from just under 2% per cent in 1986 to less than 2% per cent in 1987, in each case less than Britain. In the last few months the growth rate has been about zero. At the same time domestically generated inflation, measured by the GDP deflator, is put at 2% per cent. Thus the growth of Nominal GDP will be less than 4% per cent, even in the IMF's estimation. This is much lower than the non-inflationary objectives for demand growth on which the German monetary targets are based.

At an Aspen Institute conference in Berlin, many of the German participants bemoaned the lack of intellectual leadership in their own country; and when I mentioned the names of one or two people, I was told "economists are not intellectuals" and my names were scathingly dismissed. Perhaps the real malaise throughout German history has been the impatience with coherent analysis of meaningful problems and the identification of intellectualism with Spenglerian visions or Hegelian metaphysics.

As for the dollar, the problem is a lack of assurance that the American authorities — or

one implies the other as a matter of simple book-keeping.

Prof Lawrence Summers now joins Feldstein in arguing for a 20 to 30 per cent dollar devaluation. But when Summers presented the table to Congress in early February, he drew rather different conclusions.

Further reductions in the dollar, he said, "would reduce the trade balance but only at the cost of reducing capital inflows and depressing US investment." His emphasis on US savings and investment was nearer the point that his presentation line.

The main weakness of the "further dollar depreciation" school can be seen by looking at it from the point of view of the surplus countries. The DM has risen from over DM 8.4 to the dollar in the year, has risen from Y180 to a little over Y140. Further appreciation to DM 1.50 and Y120 would impose an excessive burden of adjustment on the German and Japanese economies (and the many others to which they are linked). As it is the reduced international competitiveness of West Germany and Japan is the main reason for sluggish world growth prospects. Further world appreciation would do damage beyond the power of the most intellectually sophisticated of us to understand.

For much of last year, water authority leaders acted as if they would welcome early privatisation, leaving the question of how water services were to be funded for another day. The D-Memo said that the water authority would be in a position largely to control the scope for other industries to make arrangements with rivers. The CBI has been strongly opposed to this in principle and for the scope it offers to snuff out competition from the only alternatives to monopoly piped services.

Water privatisation

An inescapable case for a local solution

By David Kinnersley

DROUGHT AND flood are natural hazards which water authorities in England and Wales can take in their stride, but coping with man-made political hazards they find far more perplexing.

For 1988 was a switch-back year, with privatisation semi-launched by Kenneth Baker's White Paper in February and then abruptly aborted in July by Nicholas Ridley when he replaced Mr Baker as Environment Secretary.

But 1989 may be just as bad because the second major parts of the privatisation legislation are being drafted while the water authorities, the Government and powerful interests are still at cross-purposes about what to do.

For much of last year, water authority leaders acted as if they would welcome early privatisation, leaving the question of how water services were to be funded for another day. The D-Memo said that the water authority would be in a position largely to control the scope for other industries to make arrangements with rivers. The CBI has been strongly opposed to this in principle and for the scope it offers to snuff out competition from the only alternatives to monopoly piped services.

Privatisation cannot be like that of British Telecom because water is a local resource

There is one luxury, which governments and central bankers would so obviously love, but do not have. This is to say the dollar has fallen so far that the government says that they will have another look at it later to see whether it needs to fall by more than the Feldstein amounts.

If the market's central expectation is that the dollar will fall by more than the two or three percentage points forecasted in interest differentials, then the dollar fall will take place in very short order as the result of rational precautionary action by investors.

The Group of Five needs either to take determined action to maintain present exchange rate ranges, so that a Feldstein-type devaluation seems most improbable; or to accept such a devaluation and get it over as soon as possible. Failure to do so will lead to a tottering dollar, punctuated by crises further damaging world growth.

To defend this conflict, White has invented a grander pollution inspectors covering waste disposal to air, water and land. It will start operating this month but with very few staff. Yet it is clear that rivers will become effective control of river pollution will pass from the Scots into funding water supply and sewerage services through the resident tax process and so strengthening their links with local government. This would not fit with privatisation at all.

Taking now of legislation for metering trials could conceivably mean that many managers are hoping to hang on to structures of the existing system that Westhail would be discarding. Identifying metering with privatisation creates hazards for Mr Ridley too.

Another issue taking a turn for the worse is the state of the river. The publication of the 1985 River Quality Survey — deliberately low-key for Christmas — showed the sub-division of utility services on a local basis. Why not get

The author is an International water consultant and former member of the Public Finance Foundation (3 Finsbury Street, London, WC2).

Reorganising the World Bank

From Mr P. Byrne

Sir — I heartily congratulate you and the three authors of the article: "The crisis in developing countries" (March 6). They were the most interesting articles I have read on this subject.

All the articles were apt and well-timed, more especially because the World Bank is expected to re-organise this year. This reorganisation is overdue because the World Bank has not the mechanism and power to unravel the complexities that exist in the international banking system at the present time.

The most urgent addition to the functions of the Bank is to establish a world clearing system for all international debt payments, and world financial flows. It is imperative that a world central bank exists that has the mechanism to channel all the net balances of these flows through the clearing system to avoid the fragmentation of these precious funds.

A world central bank is also necessary to act as "lender of last resort," especially to international lending banks, which have serious liquidity problems. Otherwise, panic conditions may arise which will have disastrous effects on the world economy.

The world banking system must be protected.

P. J. Byrne,
Fellow of the Institute of
Bankers (Ireland),
Marin Mar Hotel,
Costa Málaga,
Spain.

Letters to the Editor

Electronics and the EEC

From Dr P. Walker

Sir — Those of us involved in the electronics sector must be concerned at the delays in reaching agreement on the Community framework programme, and hence on the continuation of the collaborative pan-Community R & D programmes such as ESPRIT and RACE.

Having been personally involved in the mid-term review of the ESPRIT programme, I was struck by the almost unanimous support for the continuation of the programme among large and small companies in the electronics sector as to the benefits that were resulting from their participation in ESPRIT.

If one accepts and believes

Researchers and advice

From Mr D. Watkins

Sir — Your article "Pols command attention" (April 3) highlighted the opportunity open to researchers to move into the value added area of giving advice, currently dominated by management consultants.

I, of course, support thorough research as a good input into assessing appropriate strategy and welcome increased professionalisation.

However, lack of clarity about freedom is less of an issue than whether the organisation has the capability to translate those wishes into action, or can add that capability within time and cost constraints.

The overwhelming response to our newly developed consulting approaches suggests that there is a significant gap between strategy and technical systems consulting. Capability consulting will be a major growth market as organisations, knowing full well what they want to do, struggle to put their plans into action.

Research must contribute to analysis, but it can't eventually substitute for the vision and maturity of judgment which are the capabilities required to provide effective consulting advice in this emerging and critical arena.

Research must contribute to analysis, but it can't eventually substitute for the vision and maturity of judgment which are the capabilities required to provide effective consulting advice in this emerging and critical arena.

D. M. Watkins,
Operations Director, Kinsley
Lord Management Consultants,
16 Old Queen Street,
SW1.

Burton Group options scheme

From Mr D. Gorman

Sir — The Lex Column in your edition of April 4 contains an article entitled "Burton Group's options board".

It says: "No wonder the board has chosen to base its notorious options on earnings per share growth, rather than price growth. All the options will not be exercisable, and the holders will get no benefit from themselves."

The EPS-growth provisions of the scheme do not determine the amount of the option-holders' benefit. They are options which prevent the options from being exercised unless shareholders have enjoyed the specified levels of

EPS growth. Thus even if the fundamental conditions of share price performance are not met, the option-holders will benefit, but vice versa.

Don Gorman,

Williams M. Mercer Fraser Ltd.,

16 Carlton Street, S.W.1.

The roles of auditors and consultants

From Mr K. A. Mitchell

Sir — Your well balanced and objective article by Michael Skapinker on the problem of the duality of auditors and consultants made excellent reading.

Those of us who started our careers in the profession in the '70s enjoyed 10 years of dramatic growth and acceptance by industry of the role and effectiveness of the consulting function. Four major firms led this expansion by applying practical techniques and securing very significant benefits for their clients. High reputations were deservedly gained and are still enjoyed.

But since the early '70s the main protagonists have lost market share to those consulting firms stemming from audit practices. Inevitably, and with no suggestion of dishonesty, the auditor is in a privileged position vis-à-vis the client and is privy to the problems and opportunities in and facing that client organisation. The auditor should see during the course of his work the strengths and

weaknesses of the client organisation and is therefore bound to be in a position where he can recommend the application of external skills if these do not exist within the internal firm.

Thus the auditor has the "inside lane" and he would be less than human if he were not to recommend the services increasingly available from his own firm.

Where an auditor is in a privileged position, is invited to make a proposal, I suggest very positively that such an invitation should be communicated by the auditor not only to his own consulting colleagues but also to the Institute of Chartered Accountants and the Institute of Management Consultants in order that other suitably qualified firms be invited to compete on merit for the potential business.

There is one possible solution. Most clients, these days, when they recognise a situation where they should be considering the use of outside skills, invite a survey and proposal from more than one suitably qualified source of professional consulting advice. A proposal should contain an appraisal of the

situation as seen by the consultant, the proposed course of action, the benefits to be expected and the time and cost involved in hiring the consultant's services. Comparing these proposals and inserting the consultants concerned enables the potential client to choose the one he feels (rightly or wrongly) to be the most appropriate.

Where an auditor is in a privileged position, is invited to make a proposal, I suggest very positively that such an invitation should be communicated by the auditor not only to his own consulting colleagues but also to the Institute of Chartered Accountants and the Institute of Management Consultants in order that other suitably qualified firms be invited to compete on merit for the potential business.

I look forward to accounts which show the profit and loss account, the trading account, the sales account and the allocation account with the breakdown of the profit from sales. Today, most of the profits come from the variations of the share prices and that doesn't help in investing for democratic shareholding.

Kenneth A. Mitchell,
Fellow of the Institute of
Management Consultants,
1 Back Lane,
Hesley-in-Arden,
West Midlands.

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Water privatisation

An inescapable case for a local solution

By David Kinnersley

DROUGHT AND flood are natural hazards which water authorities in England and Wales can take in their stride, but coping with man-made political hazards they find far more perplexing.

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FINANCIAL TIMES

Monday April 13 1987

TROLLOPE & COLLS
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 DESIGN & CONSTRUCT
01-377 2500

By Paul Hannon
 on Wall St

Spectre of inflation returns

THE SPECTRE of inflation returned to Wall Street last week with many investors running for cover as the dollar plunged and higher short-term interest rates lurked around the corner.

The finely balanced market emotions of fear and greed tilted toward the former with the Dow Jones industrial average showing a 50 point drop over the week.

The Dow Jones utilities average, which is more interest-sensitive than the wider value of future credit market activity, was down 4 per cent during the five sessions with a fall of almost nine points to 204.34.

Investors rushed into gold and precious metals sectors, normally considered safe inflation hedges against the impact of a weak dollar.

Battleground Gold, a Nevada gold mine operator traded on the over-the-counter market and in Toronto, rose to a new 12-month high of \$336 showing a week-on-week gain of 5.7%.

St Joe Gold, with mining interests in the US and Chile, was catapulted 54% higher to \$19.42, also a new 12-month peak, as spot gold prices jumped to \$433 in erratic trading. The Comex June contract finished the week at \$438.70, a gain of almost \$13.

What the gold market did, other metals were quick to imitate. A flurry of buying in aluminium stocks, partly attributed to a strong recommendation from E. F. Hutton, triggered a 53% surge to 880% for Reynolds Metals.

Inflation and interest rate phobias were fuelled by the oil sector which brightened on news that Norway was prepared to push up prices and keep production low to help Opec's current output regime.

Most of the leading group's posted gains of between 5% to 32% although the bouquet of flowers was reserved for Pennzoil which finished the week with a 310% advance to \$2.24 on the growing hopes of settlement with Texaco in their \$12m legal joust. Texaco, showing signs of fatigue, was marked down almost 5% on the week to \$31.7, but still above its low for the year.

The recent signs of recovery in leading house-building shares faltered as the prospect of higher borrowing charges was factored into analysts' projections.

Although the overall housing market might be threatened there are some pockets of strength remaining with California still considered a house-building paradise. The market adopted a slightly more jaundiced view last week by trimming \$2 off the \$255 share price of Kaufman & Broad, the largest West Coast housing group.

Such a move is perhaps not too surprising when credit market analysts are now openly talking about a half percentage point rise in the discount rate sometime this week or next.

The latest batch of retail sales showed a mixed spending pattern and persistent wide regional variations. JC Penny was one of the unlucky ones that actually showed a drop in sales during March. It ended the week 53% cheaper at \$38.4.

Detroit did not miss any of the fun. General Motors, which served a closed session with analysts for the end of the week, began to display some of its old instinct for grabbing market share.

By any definition, American car makers should be swamped with domestic demand as the weaker dollar unravels the fortunes of their Japanese arch-rivals for the past decade. Yet the policy of many American car makers has been to move their prices up in tandem with any showroom increase of Japanese models.

The net impact, instead of actually snatching back local custom, has been simply to push up the prices of new cars overall, thereby adding to the inflationary pressures again.

As the yen has hit successive post-war highs against the dollar in recent weeks, some Far Eastern imports have jumped by as much as 22 per cent in retail prices.

In the hope that Detroit is now prepared to battle for the all-important new car market in its own backyard, General Motors roared ahead 53% to \$38.

Perhaps the important thing that emerged last week was the public impotence displayed by finance ministers of the leading industrial nations when they convened and concluded that foreign exchange rate stability was, after all, a laudable goal.

Such a hard-won conclusion will offer little solace to the markets during the next five days in which the dollar will again dictate the pace of trading. The Federal Reserve may be tempted to push up the discount rate. That may nudge the economy off its tightrope into a recession during the run-up to an election year.

Stephen Butler reports on a radical challenge to communist ideology

Vietnam seeks Western investment

SOUTH-EAST Asia's communist giant, Vietnam, is putting the finishing touches on a foreign investment law which would represent a radical departure from communist ideology and its economic practice.

The law, which is in the final stage of drafting and could be presented to the National Assembly as early as June, would allow for wholly-owned foreign companies and the repatriation of profits.

All areas of the economy would be open for investment, with the exception of defence and public utilities. Disputes could be settled by arbitration in third countries, meaning that the foreign partner would not have to rely exclusively on Vietnam's domestic legal system.

Enactment of the measures would mark the most significant economic policy initiative since the sixth congress of the Vietnamese Communist Party last December, during which Vietnam ushered in a new generation of political leadership and issued a stinging criticism of Vietnam's economic management since the close of the Vietnam war in 1975.

The law could pave the way for an opening of the economy to the Western world and reduce Vietnam's heavy dependence on the Soviet bloc. Vietnam is one of the poorest countries in the world.

Officials say the law was designed to avoid the problems that have plagued investors in China, where

where foreign investment plunged last year.

Diplomats are nonetheless sceptical that the measures in Vietnam can be enacted without revision because of their social and political implications. Doubts persist about the ability of Vietnam's bloated bureaucracy to respond to a new way of doing business.

Vietnam's infrastructure - including transport, electricity, water supply, and telecommunications - is extremely underdeveloped.

US efforts to isolate Vietnam politically and economically will also be an inhibiting factor.

The chief attractions of Vietnam are cheap wages and access to the domestic market. Vietnam's population is about 70m and growing rapidly.

Industrial wages can be less than 50 a month in official exchange rates, although the government heavily subsidises food and housing.

The method of determining wages under the draft law is still unclear. Wages would be much higher than current ones and in principle would be comparable to other wages in the south-east Asia region. Workers would be assessed for income tax, but would be allowed to retain substantially greater earnings than ordinary Vietnamese workers.

This would alleviate a key problem which arose in China, where

plant managers found they could not effectively use material incentives to motivate their work force.

Foreign joint ventures would in principle be allowed unlimited access to the domestic Vietnamese market. However, each joint venture would be responsible for all foreign exchange needs, and the repatriation of profits would be impossible if the company did not earn hard currency.

Fines would be taxed at 25 per cent, 20 per cent for ventures in priority areas. These include concerns which feature high volume exports all the economic ministries.

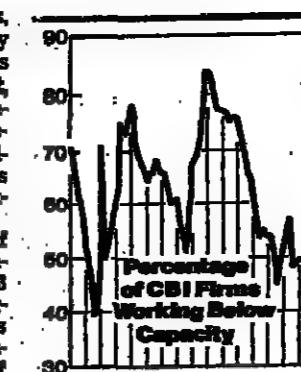
The commission is designed to provide for one-stop problem solving by cutting through the intense bureaucratic competition and infighting that plagues the Vietnamese economy. Heavy scepticism will remain until the commission proves that it can function effectively.

Japanese companies are thought likely to be the first to take advantage of the new law. Virtually all the major Japanese trading companies have established a strong presence in Vietnam. Japan is Vietnam's largest trade partner outside the Socialist bloc, with bilateral trade rising from \$12bn in 1982 to \$27bn last year.

Many observers reckon that as the process of economic reform in Vietnam takes root, the domestic market could grow rapidly.

THE LEX COLUMN

A capacity to contract



porate tax reforms, although the CBI surveys indicate that they have had little success in damping the labour-replacement motivation behind most expenditure. The reform-induced drop of 5 per cent in manufacturing investment last year was slightly worse than expected and Philips & Drew calculates that projects will now have to earn an extra 1.5 to 2 percentage points to be viable.

However, the reforms have drawn attention to the irrational Treasury obsession with merely quantitative growth in the very specific category of gross fixed capital investment. Those equally significant investments in training, marketing or innovation have never been consistently subsidised and, unless, cannot easily qualify for their own section in Economic Trends. If ever they did, perhaps companies would feel less nervous about depressing revenues through such investments.

Quality

If output can be doubled by better management and higher labour productivity than the quality of fixed capital utilisation is just as important as its quantity.

After all, throughout most of the 1970s the quantity of gross manufacturing investment was consistently above current levels but almost every other indicator of corporate health was consistently lower.

Perhaps the instinctive hostility to takeovers outside the City of London would be lessened, too, if quality could be measured as easily as quantity.

None the less, the Treasury economist may have a point. There is a limit to the improvement in a fixed-capital stock and the latest CBI survey suggests that only 20 per cent of the new investment is planned to expand capacity.

And in the multinational sector the improvement in the UK's return on capital may still look pallid compared with Germany or Italy, particularly if there is a currency advantage on the return journey.

Returns

A

return of close to 15 per cent on new manufacturing investment is now clearly attainable in the UK if strong project management can be mastered, which should be enough to keep the cash out of the bank.

However, taking the average return of closer to 8 per cent the continuing caution is perhaps more understandable.

With average returns hovering around from 11.5 per cent in 1978 down to 8.5 per cent in 1987, coming back to 8.5 per cent in 1978 before hitting the all-time low of below 8 per cent in 1981, a longer-than-usual period of sunshine is clearly required to lure the rain-soaked picknickers out from under the trees.

It remains too early to judge the investment impact of the 1986 cor-

Cartel by N Sea charterers broken

By Kevin Brown, in London

A GROUP of British shipowners in the depressed North Sea supply-boats market operated a secret price-fixing agreement known as the "Coffee Club" in an attempt to keep charter rates above break-even levels.

The cartel was almost certainly in breach of UK and EC competition law. It operated from July last year to February, when it collapsed because of predatory pricing by outsiders.

The group was emphatically known as the Coffee Club, because its meetings were referred to by participants as coffee mornings.

Mr Singh justified the hiring of the Fairfax Group on the grounds that he had been asked by the Prime Minister to bring to book all economic offenders. He said he had ordered the inquiry into the submarine deal because people close to him were involved.

Hardy had the controversy over the Fairfax investigation closed by the appointment of a two-member commission of inquiry into all aspects of the matter, then Mr Singh announced his decision to order an inquiry into the submarine deal.

Mr Singh was severely attacked for making a public announcement of the inquiry at a time when Mr Gandhi was already under attack since this gave the impression there was widespread corruption in the Government. Mr Gandhi then came under strong pressure to dismiss the Defence Minister.

Mr Singh justified the hiring of the Fairfax Group on the grounds that he had been asked by the Prime Minister to bring to book all economic offenders. He said he had ordered the inquiry into the submarine deal because people close to him were involved.

The cartel held its last meeting in February. Rates fell to £1,200 in March, and have since continued to decline steadily. Charters as low as £500 have been reported in recent weeks.

Nine companies are believed to have been members of the cartel.

All are members of the British Offshore Support Vessels Association (Bosva), which represents the bulk of UK companies operating in the North Sea.

Bosva declined to comment on the operations of the Coffee Club. It is clear, however, that the cartel was not organised by the association itself.

None of the members of the cartel would agree to quote on the record, largely because of fears of investigation by the Office of Fair Trading.

One insider said, however: "The offshore companies are first and foremost competitors in the market place; they are not a cosy cartel. They were sitting down to try to survive, because you cannot go on running ships that require £2,500 a day to keep afloat."

Another said: "A very large number of us got together early last year to try to see if we could stop the rates for the spot market falling through the floor."

"We had an agreement which kept those rates at realistic levels. It was never a sort of cartel arrangement; it was just trying to keep the rates from absolutely collapsing."

The offshore supply industry faces fierce competition from overseas registered ships, particularly those owned in Norway, which Bosva has accused of swamping the market.

Almost a third of the vessels operated by Bosva members are laid up, and a further 45 per cent are operating in the spot market, where employment is at best spasmodic.

Bosva has pressed the Government to impose restrictions on foreign competition and inward registration of foreign-owned vessels. However, ministers are known to be reluctant to agree to protectionist action of this sort.

Mr Darman also made it clear that, at least since the February

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Britain wins Chinese ships order

By KEVIN BROWN, TRANSPORT CORRESPONDENT, IN LONDON

BRITISH Shipbuilders is expected to announce today that it has won an order to build three container ships for the People's Republic of China.

The contracts are believed to have been signed in Hong Kong yesterday. The order is thought to come from the Chinese government at a time when the Government had already gone through a serious crisis and a meeting on a matter also involving Mr Singh.

This was an investigation ordered by Mr Singh when he was finance minister.

Mr Singh ordered the inquiry but same under severe attack from Congress-I members for seriously embarrassing Prime Minister Rajiv Gandhi at a time when the Government was already gone through a serious crisis and a meeting on a matter also involving Mr Singh.

Mr Singh was an investigation ordered by Mr Singh when he was finance minister.

Mr Singh is in the process of laying off 1,000 of its 1,300 hourly-paid workers and is seeking non-shipbuilding fabrication work for the rest.

The Chinese order would give British Shipbuilders an 85 per cent

more than twice as much tonnage as the UK.

The order would provide a lifeline for British Ship

INTERNATIONAL CAPITAL MARKETS

UK GILTS

Little logic behind sharp sell-off on Friday

FRIDAY'S sharp sell-off of UK Government bonds in apparent sympathy with the dramatic collapse of US Treasuries seems to have little logic behind it.

It is understandable that market-makers marked prices down in a defensive, short-term fit of nerves given the uncertainty in US markets which preceded the reformation of the Paris Accord last weekend in Washington, and the subsequent fall in the dollar to yet another record low against the yen.

These are certainly uncertain times and the International Monetary Fund's latest report on the world economy did not make happy reading and central bank intervention has yet again proved to be an ineffectual tool in isolation.

Although no understanding on interest rate policy appeared to have been reached in Washington, the turbulence of foreign exchange markets fuelled talk of interest rate moves as a buttress to the policy of stabilising currencies.

The US Treasury bond market was certainly reacting on fears of more inflation if the dollar's fall is not arrested and of higher interest rates in case these have to be used to buttress the exchange rate.

There is a difference between short-term and long-term interest rates. The US Federal Reserve is unlikely to want to raise official interest rates in the face of still-sluggish economic growth and the burdensome problem of world indebtedness.

But a shift in long bond yields could work its own miracle in ensuring the all-important capital inflows from Japan. The autonomous upward move in bond yields last week provide exactly the kind of wider interest rate differential needed in theory to bolster demand for bonds.

Although the gilt market is sensitive to the size of yield differentials between UK and US bonds—and the differential is historically at a low level particularly after last week's upward shift in US yields—current problems of confidence are clearly bilateral and highly coloured by trade frictions between the US and Japan.

There is no reason why this should adversely affect Japan's appetite for gilts (unless there

Janet Bush

US MONEY AND CREDIT

Back to life with a vengeance

US CREDIT markets, which have been as interesting as paint drying for the best part of a year, have come to life with a vengeance.

Every sector of the fixed-interest market fell sharply last week. Prices of 30-year Treasuries fell four points to end the week yielding more than 8 per cent for the first time in over a year. The municipal and corporate markets fared quite as badly, average mortgage rates are climbing and another prime rate increase this week will be no great surprise.

The cause of the fall was the plunge in the dollar, which reached a post-war low in terms of the Japanese yen, ending the week three yen down at little better than Y143.

The dollar's career this week followed a pattern which is becoming familiar. A meeting of Group of Seven finance ministers in Washington on Wednesday merely repeated the sentiment in Paris. The market has come to take such bland statements as invitations to sell dollars.

Mr James Baker, the US Treasury Secretary, compounded matters by saying that the dollar's decline had been relatively orderly. By the end of the week, and despite intervention by central banks, the dollar's fall had become decidedly disorderly.

The fixed-interest markets have survived such bouts of disorder, but not without cost. But that was before the Administration in Washington announced its sanctions on computer imports and focussed the bond market's mind back on the trade deficit. On his arithmetic, the dollar would have to fall under Y100 for a Japanese investor to lose out by going from domestic into US 10-year bonds.

The event of the week should be the publication by the Bank of England of its final word on experimental gilt auctions, expected imminently. Word was out on Friday that there has been something of a compromise in bond market psychology," said Mr David Jones, a money market analyst with Aubrey Lansdown.

Mr Paul Volcker, the chairman of the Federal Reserve, seemed to suggest last week that he did not share Mr Baker's calmness about the dollar. "The performance of the dollar in the exchange markets might become a factor bearing on provision of reserves," he told the Senate Banking Committee. From Wednesday morning onward, bond yields were moving up in expectation that the Fed would raise interest rates.

Janet Bush

Whether the Fed will do as the market fears and expects is another matter. The Fed's open market operations on Friday were interpreted in a pessimistic light. The \$1bn in customer repurchase agreements arranged was regarded as a rather small injection of liquidity and Fed Funds started inching up. "Mr Volcker is not exactly tipping the brake," said Mr Bob Bruce of Nikko Securities. "He's sticking his foot out of the car to cause some friction."

For all the talk of inflation, Friday's data on producer prices was less than alarming. The index of producer prices for finished goods rose 0.4 per cent last month, which was well in line with expectations. This suggests no more than that inflation is returning to the level of 4 per cent or so which ruled before the collapse in oil prices.

Inflation at that level would scarcely justify last week's sharp increase in the price of gold futures, which are supposed to be clues to inflationary fears.

Equally, this week's statistics on housing starts, retail sales and industrial production are likely to show an economy growing only very slowly.

The reality of inflation is nothing to the psychology of inflation," said Mr Jones of Aubrey Lansdown.

However, the market is likely to remain nervous about the need to protect the dollar. For Mr Bruce of Nikko, the extra value in US government bond rates over their Japanese counterparts—a yield differential of 400-odd basis points—should provide some stability in the foreign exchange markets.

On his arithmetic, the dollar would have to fall under Y100 for a Japanese investor to lose out by going from domestic into US 10-year bonds.

But the market badly needs signs of an improvement in the trade deficit. This Tuesday's figures for merchandise trade go back as far as February, since the Commerce Department has given up issuing preliminary estimates, but a large deficit could still hit both long-maturity bonds and the dollar.

According to Money Market Services, of Redwood City, California, which surveyed market expectations on Friday, the median of some 36 estimates expected a 0.3 per cent increase. The estimates range from a decrease of 0.4 per cent to an increase of 1.7 per cent.

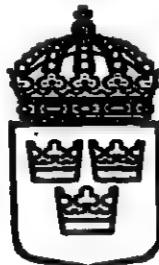
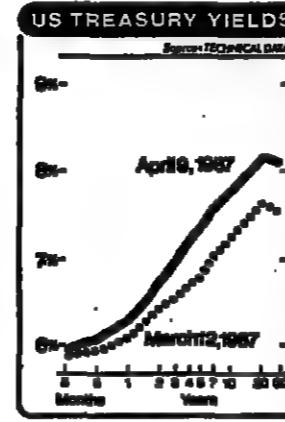
• March industrial production (due at 9.15 am on Wednesday).

With manufacturing employment down and auto assembly slow, output is expected to have declined somewhat in the month of March. The median of 36 estimates is for a drop of 0.1 per cent. The range extends from a decline of 0.5 per cent to an increase of 0.6 per cent.

• March housing starts (due at 8.30 am on Thursday). The level of housing starts is expected to be modestly down on February, with a median of 36 estimates at 1.77m units. The estimates extend from 1.58m to 1.9m.

• March retail sales (due at 8.30 am on Tuesday). These

James Buchanan



Kingdom of Sweden

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12th February 1987 All of these securities have been sold. This announcement appears as a matter of record only.

US MONEY MARKET RATES (%)

	Last Friday	1 week ago	4 weeks ago	12 weeks ago	1 year ago
Fed Funds (weekly average)	6.25	6.17	6.20	7.34	8.71
Three-month Treasury bills	6.25	6.17	6.20	7.34	8.71
One-month Treasury bills	6.25	6.17	6.20	7.34	8.71
Commercial paper 90 days	6.25	6.17	6.20	7.34	8.71
90-day Commercial Paper	6.25	6.17	6.20	7.34	8.71
90-day Commercial Paper	6.25	6.17	6.20	7.34	8.71

US BOND PRICES AND YIELDS (%)

	Last Friday	Change	Yield	1 week ago	4 weeks ago
Seven-year Treasury	95.75	-2.25	7.27	7.25	7.25
20-year Treasury	94.97	-2.25	7.25	7.25	7.25
New York "A" Financial	94.97	-2.25	7.25	7.25	7.25
New "A" Long utility	94.97	-2.25	7.25	7.25	7.25
New "A" Long Industrial	94.97	-2.25	7.25	7.25	7.25

Source: Salomon Bros (estimates). Money Supply: In the week ended March 30 M1 fell by \$26 to \$702.7bn.

N.Y. TOKYO BOND INDEX

	PERFORMANCE INDEX	AVERAGE	LAST	CHANGE	12 WKS	25 WKS
	94.97	94.97	100.54	100.54	100.54	100.54
Overall	100.54	94.97	100.54	100.54	100.54	100.54
Government Bonds	101.11	94.97	100.54	100.54	100.54	100.54
Corporate Bonds	100.97	94.97	100.54	100.54	100.54	100.54
Government-guaranteed Bonds	100.99	94.97	100.54	100.54	100.54	100.54
Bank Noteholders	100.99	94.97	100.54	100.54	100.54	100.54
Corporate Bonds	100.54	94.97	100.54	100.54	100.54	100.54
Corporate Bonds Foreign Bonds	107.65	94.97	100.54	100.54	100.54	100.54
Government 15-year?	—	94.97	100.54	100.54	100.54	100.54

† Estimated per yield.

Source: Nomura Research Institute.

FT/AIBD INTERNATIONAL BOND SERVICE

	10YR 4.87	10YR 5.00	10YR 5.10	10YR 5.20	10YR 5.30	10YR 5.40	10YR 5.50
US DOLLAR	100.54	94.97	100.54	100.54	100.54	100.54	100.54
Bank Noteholders	101.11	94.97	100.54	100.54	100.54	100.54	100.54
Corporate Bonds	100.97	94.97	100.54	100.54	100.54	100.54	100.54
Corporate Bonds	100.99	94.97	100.54	100.54	100.54	100.54	100.54
Government Bonds	101.11	94.97	100.54	100.54	100.54	100.54	100.54
Government Bonds	100.97	94.97	100.54	100.5			



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Mitsui Trust International Limited	The National Commercial Bank (Saudi Arabia)
Den norske Creditbank Group	Smith Barney, Harris Upham & Co. Incorporated
Swiss Volksbank	Westdeutsche Landesbank Girozentrale
Julius Baer International Limited	Banca del Gottardo
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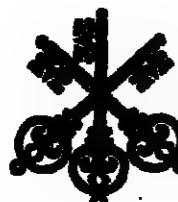
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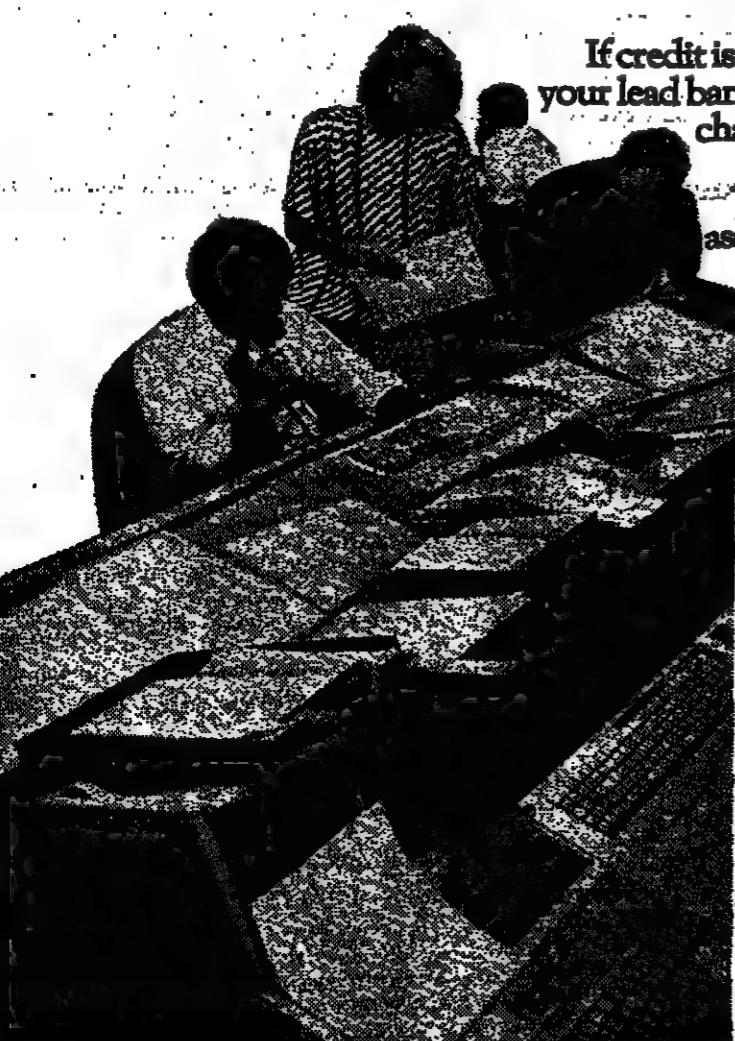
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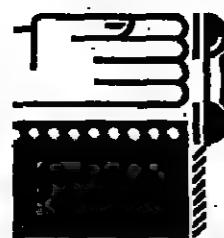
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FINANCIAL TIMES SURVEY



Trends away from giant workplaces and towards smaller businesses are reviving the old tradition of workers' co-operatives as a means of company organisation. And employee share ownership schemes, already popular in the US, look likely to grow in the UK.

Alan Pike, Social Affairs Correspondent, reports.

Back to plain common sense

"I WAS NEVER willing to believe without trial that what seemed to me to be plain common sense was in fact unworkable."

The words are those of John Spudan Lewis, creator of the John Lewis retailing organisation, one of Britain's best-known and most successful employee partnerships, in its present form.

There is today a widespread consensus that it is plain common sense for employees to be more closely involved in the organisations for which they work as shareholders, partners and owners. All the main political parties subscribe to the ideas in one form or another.

But like many ideas which public opinion may agree are plain common sense, the development of employee ownership has been slow and uneven.

The John Lewis Partnership, for all its founders' ideals and its current success, remains an unusual form of company organisation. Workers' co-operatives still frequently provoke images of idealistic fringe operations, or last-ditch attempts to revive dead companies, rather than sound com-

mercial enterprises. Employee share ownership schemes have been slower to take off in the UK than in the US and elsewhere.

But there are signs that the pace of change is increasing. The declining number of people employed in conventional big plants, and the Government's concentration on small business as a generator of economic growth and employment, increases opportunities for co-operative forms of organisation.

And surveys suggest that employee share ownership plans, or Esops, well-established and popular in the US, are set to grow substantially in the UK.

Unity Trust, the trade union financial institution, has conducted extensive surveys into the opportunities for employee share ownership in the UK and has devised a model Esop. Earlier this month RoadChef, the motorway service area operator, became the first organisation to introduce an Esop on the Unity Trust model.

RoadChef has set up a £250,000 trust fund which will allocate free shares to longer-serving staff, and buy them back for tax-free sums when workers leave or retire. Unity Trust — which

provided £350,000 towards the £650,000 required to establish the fund — will this month be launching its Esop proposals nationally. Given its unique position as a trade union-backed organisation in the City, it could play a pivotal part in spreading the Esop message to both boardroom and shop floor.

Unity Trust carried out research in a range of countries in its search for a model British Esop. It found a variety of different approaches already established — a central government programme in Sweden, a trade union company buying shares in the Netherlands, and a tradition of direct trade union equity investment in West Germany.

Mr Terry Thomas, managing

director, says Unity Trust decided on a version of the US Esop as the most suitable approach for the UK.

The central purpose of the Unity Trust model is to create new risk capital. We lend money to the trust on behalf of the employees. Since the employees do not have to put up the capital in the first place, the scheme allows all to be involved, rather than just those who can afford to bear the share risk. The values of the shares will then be driven by the employees' own performance."

Esops may be relatively rare in the UK at present, but there are signs that they are about to grow. Unity Trust estimates that there will be at least 10,000 UK employees in Esop-type

schemes by the end of the century. But many employees do, of course, already benefit from more conventional share schemes.

A survey of Britain's top 1,000 companies published this year by Cooper & Lybrand in conjunction with Monk's Partnership shows that 67 per cent have executive share schemes and 33 per cent SAYE share option schemes. But a much smaller proportion of the 1,000 companies have 16 per cent profit sharing schemes.

Share schemes are shown by the survey to increase in popularity with size of company. Of the 200 companies in the survey with turnovers exceeding £271m, 84 per cent have executive share option schemes. 67

per cent SAYE share option schemes and 27 per cent profit sharing schemes.

Cooper & Lybrand says the research indicates that take-up in SAYE share option schemes remains "disappointingly low." On average, between 16 and 20 per cent of eligible employees join such schemes. In a quarter of the companies surveyed, fewer than 10 per cent of eligible employees had joined such schemes.

But it might be thought that popularity of shareholding brought about by recent privatisation issues would ensure greater interest, we suspect success depends on a combination of good presentation and company morale."

Although profit sharing

schemes operate in only a minority of companies, Coopers & Lybrand, like Unity Trust, sees a steady increase in such schemes over the next few years.

"Although these schemes are the most complex, they are also the most flexible. Employees can, but need not be asked to contribute. The scheme can be used in private companies to finance the purchase of family shares or to assist in a management buy-out."

Conventional workers' co-operatives did not improve their image as a viable form of business organisation in the 1970s with the well-publicised establishment—and equally well-publicised failure—of the Meriden motor-cycle co-operative, Kirby Manufacturing and Engineering and the Scottish Daily News.

But in the small business environment of the 1980s, the co-operative ideal remains alive and growing. The number of workers' co-operatives in community businesses rose by two-thirds to 1,476 in June 1986. Over the past six years there has been a five-fold increase.

The Co-operative Development Agency, a public body, is making successful attempts to bring small businesses together in joint marketing co-operatives. And it has been assisted by the Government to carry out an experiment in Middlesbrough on the lines of the famous Mondragon co-operatives in Spain. Co-operatives are also receiving support from many local authorities.

The Partnership's supreme purpose is to secure the fairest possible sharing by all its members of the advantages of ownership. And it is often argued that, that is to say, their happiness in the broadest sense of that word so far as happiness depends upon gainful occupation."

This comment by John Spudan Lewis would be supported by many of those currently involved in the co-operative movement. But in case it sounds too idealistic to have value in a competitive business environment, it needs to be examined against the modern performance record of the John Lewis Partnership.

Mr John Sadler, deputy chairman, accepts that it is almost certainly easier for a new business to finance its establishment by conventional rather than co-operative arrangements.

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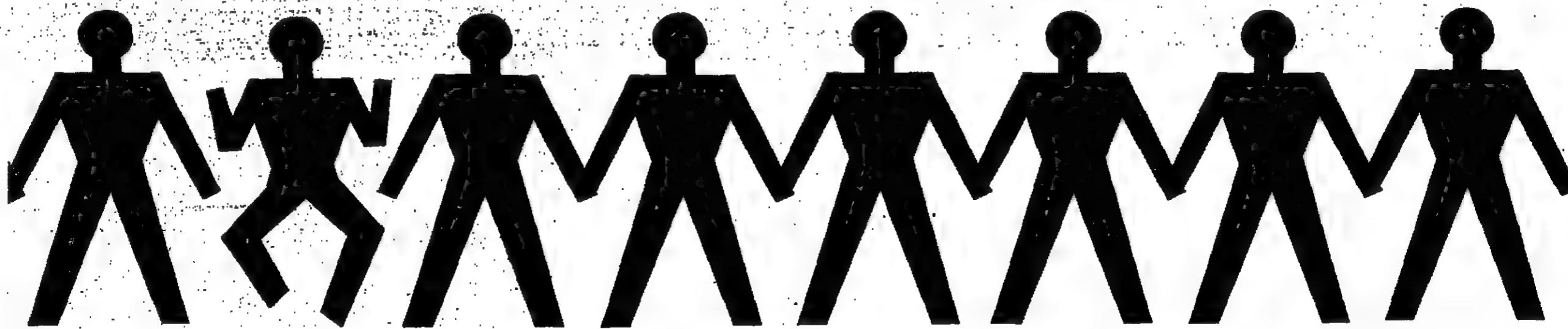
Monday April 13 1987

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Employee Ownership



Averting closure by co-operation: workers at Barnsley Metal Finishing



Looked at employee share ownership lately?

Have you noticed there's one new approach that's different?

ESOPs (Employee Share Ownership Plans) are beginning to interest more and more employers because, among other attractions, they appeal directly to those they employ. ESOPs set out to make winners of both management and workforce, so they can hardly fail to assist the growth and success of a company.

The broad aims and advantages of an ESOP can be simply put:

1. To provide a company with loyal capital for expansion at modest cost.
2. To create a substantial and permanent employee shareholding in a company. (Unlike conventional schemes ESOPs increase the attractiveness of minority equity stakes by making an internal market in the shares).
3. To give employees — and this includes work floor operatives as well as white collar staff — a long term capital stake in the future of their company.

The growth of ESOPs

In 1973 ESOPs were hailed in their birthplace, the USA, as a way to "provide cheap finance for business, at the same time cutting workers in on the potential for capital gains".

The idea took off: in 1974 300 ESOPs were established and ten years later, in 1984, the number had risen to 7,000, covering no less than 10 million employees.

A 1984 study by the US National Center for Employee Ownership suggested that ESOP companies performed better than non-ESOP companies in a carefully monitored sample.

Based on analysis of the US phenomenon, ESOPs are now being sponsored by Unity Trust, the trade union and co-operative financial institution, in a form

designed to meet the fiscal, legal and social circumstances of the U.K. As well as fulfilling all current legislative requirements in the UK, ESOPs go with the grain of all the major political parties in terms of economic thinking. In the new attitudes that are beginning to take hold in business Britain, ESOPs are well ahead. ESOPs offer the means to bury the old "Them and Us" antagonisms by fusing individual and corporate interests within a company to the general advantage.

Company proprietors, major shareholders, financial and personnel directors will want to know more.

A booklet dealing in detail with the way an ESOP works is now available. It explains among much else how a basic trust is set up, how it is funded and how it is used.

With the information given anyone investigating Employee Share Schemes on behalf of his company will be able to analyse and compare.

Nobody preparing a report in this field should neglect the full implications of an ESOP as a means to boost employee morale while at the same time improving a company's financial position.



Please write for the
ESOPs booklet to:
Unity Trust plc,
1 Carlisle Avenue,
London EC3N 2ES
Tel: 01-265 1147

EMPLOYEE OWNERSHIP 2

Economic outlook

Bugbear of equity participation

WHEN IT comes to finance employee-owned businesses, in the true co-operative model, start with a big mag: principles.

And the host of government measures, designed to increase Britain's share-owning democracy or to foster profit-sharing, have done little to help.

It is well, according to the National Co-operative Development Agency, that while the number of co-operatives has grown rapidly from around 300 in 1980 to close on 1,500 at present, their expansion has been achieved largely by the ploughback of returns generated or by conventional bank lending.

The essential problem is the reluctance to relinquish equity ownership to an outside body—financial institution or otherwise. In a typical venture capital situation, the financial backers may prefer to have some form of control, but there is an inextricably some sort of equity stake attached. Within the constitution of many co-operatives (certainly among the purists) such a move would be impossible: only workers hold the shares.

Even in the more liberal versions, any share stake given to financial backers would effectively make them part of the co-op, something conceivable if a local customer is providing the funding less acceptable where an outside institution is concerned.

This, though, is a fundamental problem now well-recognised by the co-operative movement—and one to which adherents themselves are finding an increasing number of solutions.

True, even at the conventional banking level, odd concessions can be found. The Co-operative Bank, which for all that it operates on a strict commercial criteria, remains acutely conscious of its roots. It runs a specialist unit, concentrating on small businesses and co-operatives in Manchester, and reckons to have around 400 co-ops among its customers—"about 30 per cent of those we could feasibly service," claims Mr Peter Walker, manager of the unit.

Most practically, its standard published commission rates—based on a customer's turnover—are 0.35p per cent for co-ops, compared with 0.45p per cent for other customers, small businesses included.

That said, as with all banking decisions, rates and interest charges are varied with the quality and security of the business involved. But the bank firmly maintains that its experience in the co-operative field has done nothing to deter it from this form of customer.

"There is no evidence that these businesses are less likely to succeed—if anything the survival rate is a little better," claims Mr Walker.

In general, though, the more innovative financing schemes have come from within the business itself. One leading player is Industrial Common Ownership Finance (ICOOF), which was set up in 1973 by pioneers of the new co-operative wave. Helped by £250,000 in government funding, and drawing additional money from local authorities and other successful co-operatives themselves, ICOOF has resources totalling some £260,000—of which around £307,000 is out on loan.

Technically, it is a private company, limited by guarantee; by trade union funds and in a second by the local community.

But the real bugbear is the reluctance of co-operatives to tap into the burgeoning Business Enterprise Scheme, which by allowing individuals to invest up to £40,000 a year in BES companies and claim relief against their highest rate of tax, raised some £150m for small and embryonic businesses during the 1985-86 tax year. But for co-operatives there is again the inevitable equity problem.

The prospective pool of funds is sufficiently tantalising for the CDA to make tentative approaches to the Island Fund managers. Its idea is that outside investors who were interested in a co-operative project could be offered a certain return payable at the end of, say, five years. By marrying up the co-op and the investor via a partnership agreement, tax relief might be applicable.

Initial soundings from the Revenue, says the CDA, have been neither encouraging nor particularly enthusiastic—indeed, a proposal based on a similar idea looks to be the next step. The problem is that even if the idea can be sold to the taxman, there are still investors to be dealt with—and there is no shortage of rival claims.

Mr Peter Walker, manager of the unit.

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Tackling the equity problem head on, another recent development has been "equity participation co-operatives."

Here there is a two-tier structure. First comes a conventional trading business in which both the EFC and outside investors hold equity stakes. The EFC, however, is wholly-owned by workers in the business; moreover, through the company's articles, board membership and voting structure, it controls the trading business. In the event of "default" by the trading company—failure to meet certain conditions—that control is lost and swings to the outside investors.

Cynics may point out that the protection comes too late, but the formula has proved successful in three cases, according to the CDA. One distinctive co-operative, a double-dealing business and a garden centre, spread geographically from Shropshire to the North-East. In all three, local government money was involved, in one case assisted by trade union funds and in a second by the local community.

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Shadow Chancellor Roy Hattersley favours extension of employee shareholding if it extends the rights of part ownership.

Political attitudes

Divergence on where the power lies

NOTHING DIVIDES the political parties as much as issues on which they at first sight appear to be united. All parties agree that it is desirable for employees to have a stake in their companies, but the visions underlying their enthusiasm are very different.

For the Conservatives, worker shareholders are an important element in popular capitalism, and even in the co-operative form of endeavour, has a role in the market economy.

Employee stakes have been a major element in privatisations and share options, especially for executives, are encouraged in pursuit of the view that incentives do not aid wealth creation generally.

Labour is also in favour of almost all of that, though, like the Alliance, it does not approve of share incentive schemes which are confined to executives.

It sees the Conservative vision as part of the Government's general policy of splintering the collective voice of employees by

concentrating on the role of individual shareholders.

The party puts more emphasis on the ownership of shares by employee trusts, so that the voice of workers in a company would have real influence, even control, over decision-making and in the choice and style of management.

The Alliance regards worker shareholding as an extension of its theme of partnership into the workplace. The Alliance, like Labour, feel that participation through shares is one way of breaking down the barriers within businesses.

The Alliance parties argue for a greater sharing of the risks and rewards of business, as part of their desire for popular capitalism of purpose, active workers and managers. In their policy book, *The Time Has Come*, Dr David Owen and Mr David Steel say: "We want an industrial climate in which it becomes commonplace for labour to hire and organise capital."

Such expressions are a long way from the Conservative view.

Popular capitalism requires the growing participation by individuals in the equity market place, where the shareholder operates as an individual rather than collectively. The Government favours, and has done much to foster, employee share ownership, but is cautious

about putting too much emphasis on it.

The Conservatives argue that it is not necessarily healthy for an employee to have his or her salary, pension rights, and shareholdings all tied up with one company. They want to see individuals retain their personal stake in a capitalist system and certainly have no sympathy with Labour's approach. How, they ask, would it be possible to ensure that union-ministered trustees would always have in mind the long-term interests of all employees?

The whole point of employee ownership, they say, is to make people identify with their companies—trying to make people realise that capitalism is for them. One Labour put it this way:

"The Government is proud of its record in the field—there are more than 1,200 all-employee schemes and 2,000 executive only schemes. It dismisses Labour and Alliance criticism of the latter, arguing that there would be a lot fewer employed shareholders without them, that some reach a long way down within companies, that they fit in with the principle of giving incentives to those at the top." Dr Owen argued that the Government should encourage companies to take the next step forward into the all-employee plans.

The number of co-operatives has also expanded under the present administration, from about 300 in 1979 to about 1,400 in the later part of last year. For Conservatives, the worker co-op is simply another form of capitalist enterprise. It proves that you do have to be a capitalist to be a capitalist—a person can be a capitalist in his or her own business, whether it is a conventional company or a co-op.

Indeed, the Conservative approval of co-ops is strengthened by their tendency to survive better than other types of business.

The high survival rate is also a factor that appeals to Labour, whose faith in co-ops is undiminished since the well-publicised failures of the 1970s. Party officials point out that to argue that those failures spelled the end of co-ops is as logical as to argue that the large number of companies which go bankrupt every year signal the end of capitalism.

For Labour, the co-op is the most effective form of employee share ownership, distributing power and benefits equally among its members and potentially creating new jobs at a lower average cost than many other forms of job encouragement.

Co-operatives and employee share ownership fall under the

umbrella Labour policy of social ownership. Mr Roy Hattersley, the shadow Chancellor, has argued: "The extension of employee shareholding (if it carries with it the rights which part ownership is supposed to convey) is wholly consistent with the aim of socialism—the more equal distribution of power and wealth and the consequent emancipation of working people. It is also in the interests of the economic success and social cohesion of this country."

The fundamental difference between Labour and the Government is Labour's insistence that the broadening of power and influence is part of the exercise. The party emphasises that it does not see such control as a vehicle for employees to take over the day-to-day running of companies, but Labour does see worker shareholders having influence on strategy and general policy.

The party argues that the trusts are a solution to the problem of dilution of the value of existing shares by the issue of new shares to employees. The trust would be set up to buy existing shares on behalf of employees, thus breaking down the resistance to employee ownership by some institutional shareholders.

The Alliance is less concerned with control and more with its general theme of partnership. The Alliance parties say they are all about breaking down the barriers in society, which includes the fostering of a greater sense of common purpose between employees and managers.

They are critical of the existing share incentive schemes, which they say do not do enough to bring the longer term into the picture, and they are emphatic that they would not allow the sort of schemes which give benefits only to the executives. They fear that the current trend in government thinking might encourage companies to leave employees taking all the risks through profit-related pay, while executives are protected by share options.

The Alliance, like the employer part of the industrial partners, is providing the knowledge of the company's operations which is not shared by the other shareholders. The result, they argue, will be better industrial performance and a "dynamism of success."

They view co-operatives as enterprises which wholly embrace the participative ideal—combining job ownership with participative and democratic procedures. As the two Davids put it:

"The various party policies on the issues are unlikely to have a major influence on voters' decisions in the forthcoming general election. However, it seems certain that, whoever emerges victorious, the onward march of employee ownership will be quietly cheered on from Downing Street."

Tom Lynch

The Co-operative Bank headquarters in Manchester: a unit concentrates on small businesses.

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EMPLOYEE OWNERSHIP 3

France

A tarnished image needs refurbishing

THE FRENCH co-operative movement, which has long been seen as a leader in the field of worker ownership in Europe, has reached a difficult crossroads. After steady development during the last 20 years, the growth of the movement has halted; large co-operatives have gone out of business and newly created ones have not managed to offset the loss of those that went bust.

"We are now asking ourselves many questions and trying to develop a strategy to enable the movement to resume its growth," remarked an official of the Sociétés Coopératives de Production (SCOP), the association which groups together French industrial and productive co-operatives.

With 34,000 people in different co-operatives in 1985 it has seen its workforce decline to around 34,000 people last year.

"We have seen some old but large co-operatives fold up, especially in the building sector. Smaller new start-ups have also not been sufficient to make up for the loss of the old concern. Moreover, the rate of growth in new start-ups has also slowed down," the SCOP added.

Indeed, new productive co-operative start-ups totalled about 200 concerns, creating 2,200 new jobs last year compared with 230 start-ups in 1985 and 2,500 jobs.

Although it might be tempting to think that the arrival in France last year of a new right-wing government was one of the reasons for the stagnation of the co-operative movement, officials of the movement readily acknowledge that this has not been the case.

The former socialist government had at the beginning been extremely favourable to the co-operative idea as a source of new jobs. But it did not particularly support the movement in practice while it was in office.

Other economic factors, by the policy of economic rigor which the socialists launched during the second part of their term in office.

The movement was clearly apprehensive when the right returned to government 12 months ago. "But you cannot say that the change in government has brought about any direct modifications to our move-

ment," said Mr Jean Gautier of the SCOP. However, if there have been no direct repercussions from the new French political situation, the movement has had to face the indirect effects of the government's economic policies.

More significantly, the movement has been forced to adapt to a major change in the mentalities of French workers and salary levels, and to re-think the economic and industrial evolution of the country after several years of difficult and continuing restructuring and a policy of economic rigour coupled with a more liberal free market approach.

Apart from the start-up business, a major source of new co-operatives came in the past from the number of bankrupted or troubled companies owned by employees of these concerns.

During the last months, this source of co-operative activity appears to have declined significantly.

This is in part explained by the fact that the French union movement and employees in general have become more cautious and in the case of troubled companies less inclined to become demoralised and anxious for future job security. This has meant that a large number of employees, who could in the past have been tempted by the idea of starting a co-operative venture by taking over a bankrupt company for which they worked or one on the brink of collapse, have preferred to turn to the various government-backed job retraining and industrial re-education schemes launched during the last five years as part of the general restructuring of French industry.

Another past source of co-operatives has also suffered by the changes in the economic and financial environment of the country. This involves the transfer of small businesses into co-operatives to overcome problems which risk either dismembering or forcing the sale of a small enterprise. This has long been a major issue in France where about 65 per cent of the country's small companies have no family successors.

Because of the risks over the survival of such enterprises, the French administration encouraged both management

and employee buy-outs as well as the conversion of small family businesses into co-operative ventures.

These conversions into co-operatives have been running at an average of 20-25 a year since 1981, but the figure is expected to decline sharply this year.

The explanation for this decline in co-operative conversions reflects the increasing interest in France for leveraged buy-outs, where enterprises normally by a small number of senior management members. After a slow start, due to what was regarded as inadequate legislation to encourage such buy-outs known in France as Reprise d'Entreprise par les Salaries (RES), the rate of new management buy-outs has sharply increased in recent months and is expected to continue doing so.

The development of venture capital and venture capital funds has also boosted the management buy-out business and in turn increased competition for co-operative conversions in this sector. The trend appears increasingly to favour buy-outs by small groups of senior managers, with blue collar or other salaried employees preferring to remain out of the unit operation.

The French co-operative movement has also continued to suffer from an overall image problem. This has been exacerbated by the difficulties a number of large co-operatives have faced during the last two years.

Some of the country's biggest retailing and distribution co-operatives have gone bankrupt while others, like the co-operative supermarkets, discount store chain and hotel chain over the Garonne, the Groupe des Fonctionnaires and the Habitation-Maternité group.

"Our bad image is currently a problem," officials of the movement acknowledge. "It will be one of the challenges we will face. To try to restore the image of the movement and enable it to put it back on a growth path."

Paul Betsch

Spain

Mondragon still a shining model

turnover of Pta 160bn (£765m), one-fifth of that figure in exports. A venture that started out making oil stoves is now producing robots and competing directly with a refrigerator plant to China.

The first co-operative in this old iron region was founded in 1956 by five students of a technical school which had been set up by a far-sighted priest. This other, opposite, is an applied research laboratory, co-financed by the co-operatives and by the Basque regional government, is part of the key to Mondragon's survival and testimony to the professional approach which is its main hallmark.

Regarded elsewhere in Europe as a model of its kind in worker-ownership, Mondragon is probably better known abroad than in Spain itself, where it remains unique as a large-scale application of co-operative principles in industry.

Such is the scale of a co-operative unit that it leads a discreet, publicity-shy existence, concentrating in typical Basque fashion on doing its own business.

Co-operatives linked to the Mondragon savings bank last year employed 17,500 and had

turnover of Pta 160bn (£765m).

AN HOUR'S drive south-east from Bilbao, a string of mostly small factories dots the wooded valleys around the small town of Mondragon. In landscaped grounds on the hillsides, two modern buildings create something of a campus atmosphere.

One, a long low building with a commanding position, is the headquarters of the Caja Laboral popular savings bank, hub of Mondragon's 30-year old co-operative experiment.

The other, opposite, an applied research laboratory, co-financed by the co-operatives and by the Basque regional government, is part of the key to Mondragon's survival and testimony to the professional approach which is its main hallmark.

Under Spanish law, half of co-operatives profits go to reserves. The other half is distributed. In Fagor, which groups 13 separate co-operatives, the units pool their profits before distribution. They are then paid out according to job grade, adjusted upwards or downwards depending on how the individual employee's performance is evaluated.

Employing 6,000, with sales of Pta 47bn last year, this group has managed to keep its head above water in one of the most crisis-ridden sectors of industry, the electrical "white" goods hit by a slump in demand, overcapacity and the threat of even fiercer competition as Spain reduces its import tariffs under its EEC transition arrangements.

Fagor, the biggest Spanish company in the sector, has moved away from the old system of loosely-associated co-operatives towards the divisionalisation of more conventional large corporations. In response to the demands of EEC competition, the idea of a diversified group has replaced that of separate specialised units.

Its 13 member co-operatives, which retain their legal autonomy, are mostly spin-off ventures created during the 1970s.

These new operations, grouped together with Fagor, when taken together with other units which became redundant with the modernisation of the domestic appliance production lines—thereby overcoming one of the in-built handicaps of the co-operative system, the difficulty of shedding labour.

In the event, the group will have gone through its streamlining process virtually without job losses, thanks to new activities.

It is now organised under central management with three divisions: its restructured electrical goods operation and its growing sectors of industrial components and engineering and capital goods.

Its products, exports of which were once limited to markets such as Algeria, are becoming increasingly well-known in the EEC, and the group has ambitious plans for North America and the Far East.

The picture is in fact managed to come through the crisis in better shape than any other Spanish company in its field. But its success is in part a social phenomenon. In other, more individualistic parts of Spain, the co-operative ideal has not thrived so well.

Spain's co-operatives are mainly in the farm sector, devoted to sheep breeding, joint processing and marketing. In other spheres, worker-ownership either from government or from labour organisations or from the banking establishment.

Spain's 1978 constitution calls for the public authorities to "encourage co-operative societies by means of appropriate legislation." After one unfulfilled plan by the previous centrist administration, the socialist Government has only now taken steps of introducing a new law at national level.

In the meantime, regional authorities in the areas where co-operatives are most active—the Basque country, Catalonia, Valencia and Andalucia—have brought out their own regulations, which threaten to clash with the new legislation.

Traditional spin-offs of companies are still practically unknown in Spain, since banks have shown little interest in backing them. But the presence of new merchant banks and foreign banks could change this picture, especially now that significant segments of Spanish industry are rapidly changing hands in the wake of EEC entry.

David White

Case-study: Computer Management Group

How to achieve low staff turnover

LAUNCHED BY three individuals back in 1964 CMG, the Computer Management Group, now employs more than 1,000 people split almost equally between the UK and the Netherlands, making it one of the most successful of the new breed of employee-owned companies.

Ninety per cent of CMG's staff are computer specialists and the company is divided into a series of specialist companies covering the whole spectrum of computer operations from payroll and accountancy services to information technology and financial services to manufacturing systems.

The list of CMG users includes the UK and Dutch Governments together with a range of top company names such as Chase Manhattan, Pearl Assurance, Jaguar, Ford, British Airways, British Telecom and Mercedes-Benz.

About three-quarters of the staff own shares and this according to Mr Nick Schofield, group director, a veteran of more than 20 years with CMG, brings a degree of commitment and loyalty.

"We believe it helps to achieve a low turnover in staff—about half or less than is normal in the computer industry," he argues. Only employees and close relations can buy shares in CMG and when employees leave, their shares have to be sold. Dealings take place only once a year at the end of June, the process starting at the completion of the annual audit.

In addition to the valuation put on the company by its auditors CMG commissions a merchant bank this year Lazards, to produce an independent valuation. It changes the merchant bank it uses every two years. The board weighs up the advice received, and sets a share price for the year.

CMG staff are asked in April if they want to buy or sell. The directors then match buyers and sellers and if necessary make fresh shares available. More shares are being made available, however, as a result of the decision by one of the directors and a founder of the company Mr Doug Gorman to reduce his 18.15 per cent holding on a phased basis to 10 per cent by his retirement.

James French

Mr Nick Schofield, group director of CMG: three-quarters of staff own shares

works for us, works for you.

When the National Freight Consortium was formed in 1982, the concept of sharing business decisions between management and employees was considered by many to be just a theory—with possible radical overtones and deemed to be unpopular with both sides of industry.

"The workers won't be interested in becoming shareholders and neither side will want to bridge the industrial gulf between Management and Employee."

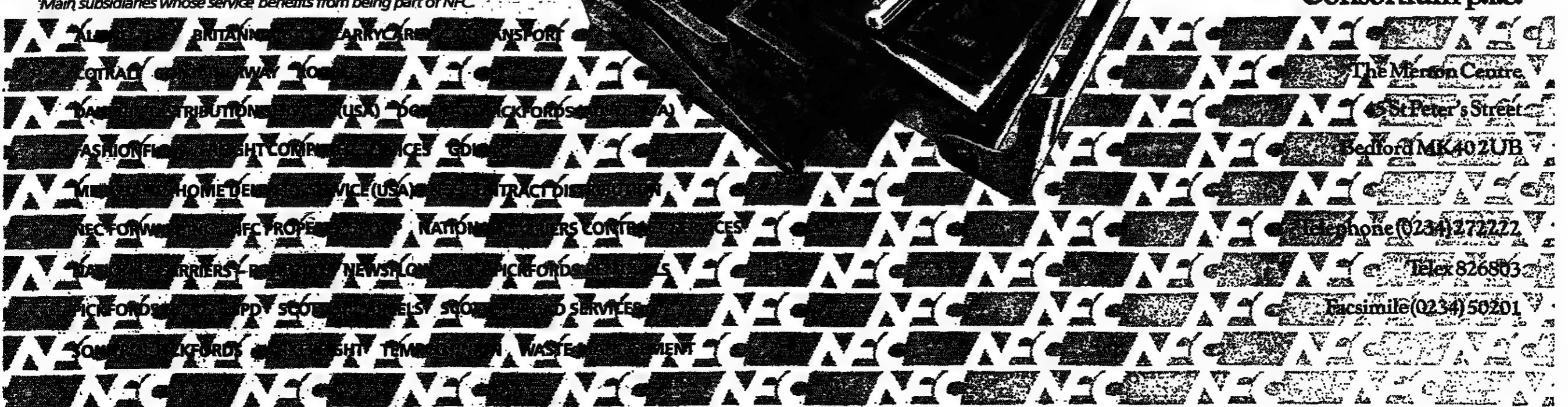
...these and many more were the words of the pundits.

We believe NFC, the United Kingdom's largest transport, distribution and storage operator, has consistently demonstrated that the pundits were wrong.

Over 60% of our employees have a personal stake in the business and with the powerful commercial combination of professional management and employee ownership we are all sharing in the rewards—through a strong growth in turnover, profits and earnings per share—up 50% last year.

The simple buying of shares was not by itself sufficient to achieve a sharing commitment. The key to this successful partnership is communication, and more communication.

Main subsidiaries whose service benefits from being part of NFC



In NFC, there is a positive and continuous effort to encourage involvement and participation.

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EMPLOYEE OWNERSHIP 4

United States

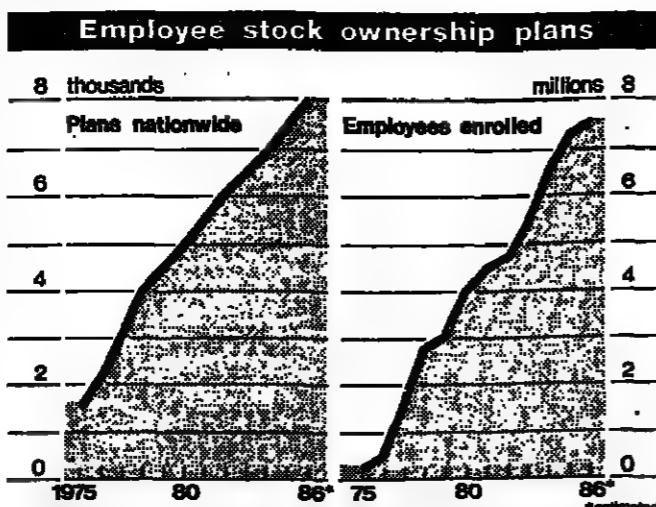
Esops win their spurs

ON MARCH 2 1982 the people of the small steel town of Weirton, West Virginia, discovered that the survival of their community was threatened. After more than 70 years of operation, National Steel, a major US steel company and the owner of the Weirton steel mill, announced that it planned to close the local mill, far and away the largest employer in a town of 25,000.

What followed was a desperate search for a way to keep the mill open and save the town. It had a happy ending after the workers and the community stumbled upon a relatively new financial device known as the employee stock ownership plan, or Esop for short.

It is a drama which has been played out in a handful of well-publicised situations around the US and has fuelled the popular image that the Esop is a tool for saving failing companies, helping block hostile takeover bids, or the spread of work-forces. However, the growing band of Esop supporters are anxious to dispel these images.

"Esops are one of the fastest-growing new ideas in American business. From fewer than 300



in 1974, the number of Esops has grown rapidly so that today there are over 8,000 plans in existence," says the Washington-based Esop Association, the main booster for the concept.

Aside from publishing a regular newsletter and actively lobbying on Capitol Hill, the association will host its 10th annual convention in Washington next month at a time when it says that "interest in employee ownership is at an all-time high".

Most of the intellectual thinking about Esops has been pioneered by Mr Louis O. Kelso, a San Francisco investment banker and economist, who has just published his latest book on the subject, *Democracy and Economic Power: Extending the Esop Revolution* (Battenger Publishing Cambridge, March 1985). The publication describes it as "must reading" for anyone concerned about the economic fate of individuals and the future of democratic institutions in our rapidly automating world."

Mr Kelso sees the Esop as "a tool to help restore the economic democracy America once had but lost through technological advance, and correct the defect in our capitalist system that keeps capitalism from working for the many as well as the few."

Mr Kelso has won quite a backing in the US and his fans range from Senator Russell B. Long, who for many years was the chairman of the Senate Finance Committee and is a leading champion of Esops in the US Congress, to the United Textile Workers of America.

The latter says that an Esop "represents the best vehicle for achieving the ultimate goal of trade unionism: the equitable distribution of wealth between capital and labour."

Mr Kelso estimates that 10m Americans, or 8 per cent of the workforce, are buying all or part of the corporations for which they work, and forecasts that the proportion will rise to 25 per cent by the year 2000 as the popularity of the "peaceable, bloodless ownership revolution" increases.

Mr Kelso writes with the urgency of a prophet firm in the belief of the justice of his cause and a more down-to-earth assessment of the importance of Esops is contained in a report on employee stock ownership plans issued by the US General Accounting Office (GAO) last December. The GAO was set the task of finding out whether Esops are achieving the goals of

broader stock ownership and providing a mechanism for corporations to raise capital, and if so, at what cost.

The intellectual underpinnings of official support for Esops in the US is the belief that the concentration of stock ownership, the dependence of firms on internal sources of funds for corporate finance, and the slow growth of productivity in the US are serious and related problems that can be addressed by making employees owners of stock in the companies that employ them.

The GAO's analysis indicates that Esops do provide a broader distribution of stock ownership among covered employees than generally prevails in the US population.

"Esops do appear to broaden the degree of capital ownership within the corporation, but the small number of employees covered and the percentage of all stock held by Esop trusts put an upper limit on the extent of overall expansion of capital ownership in the US associated with Esops," says the GAO report.

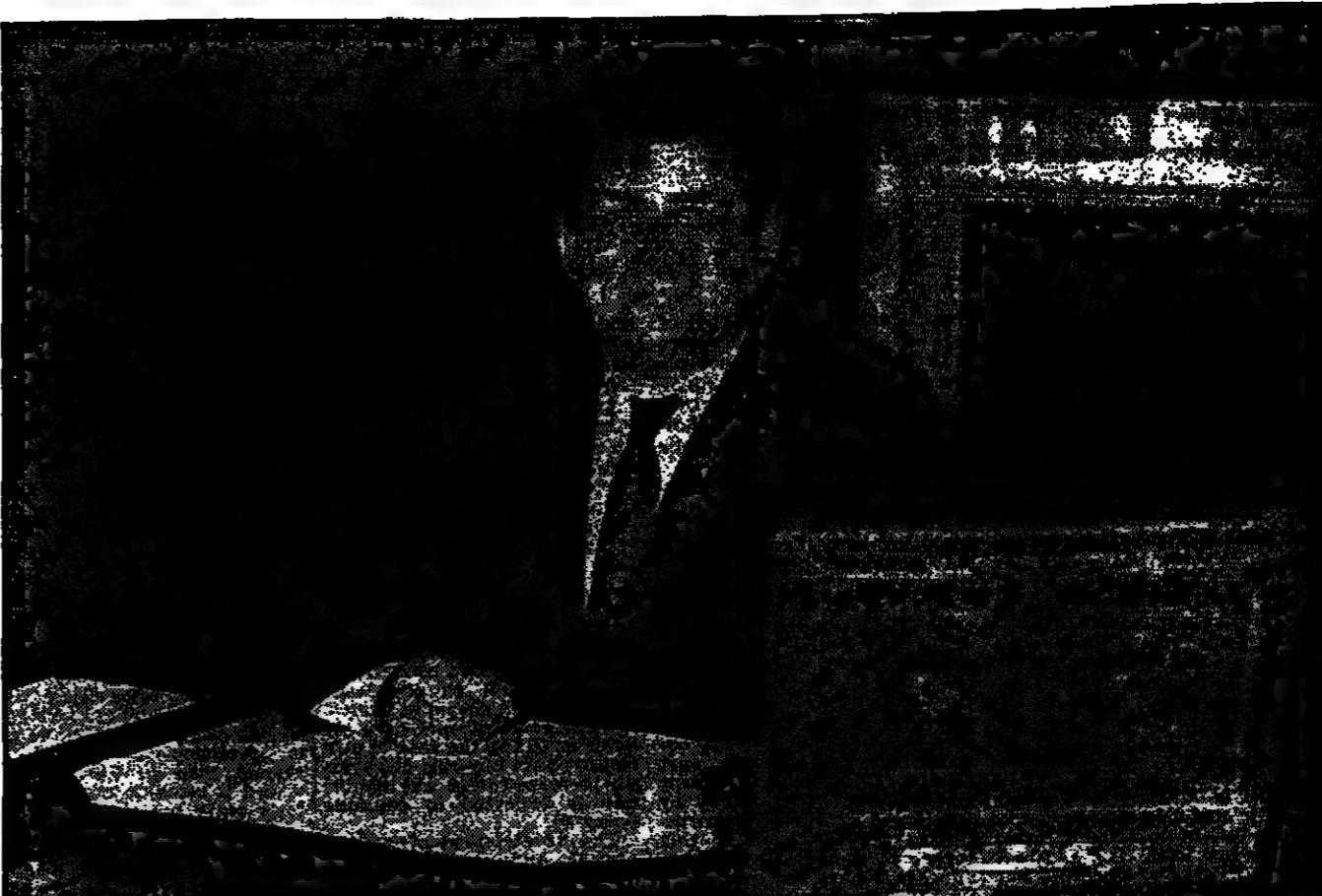
The GAO estimates that as of March 1986 there were about 4,800 Esops active in the US and an additional 2,400 million stock options. As of 1983, Esops covered more than 7m workers and held nearly \$19bn in assets. The study concludes that employers established Esops for a number of reasons, but by far the most commonly cited purposes were to provide a benefit to employees, utilize tax incentives and improve productivity.

The tax incentives for Esops cost an estimated \$1.7bn to \$1.9bn per year, or \$13.3bn over the 1983-85 period. These costs are high, relative to the \$19bn in assets participants have accumulated to date," says the GAO.

The GAO study concludes that if Esops are to have more than a limited effect in broadening stock ownership, several conditions would need to change. First, more employees need to be covered by Esops. Second, stock ownership through the plan would need to be made more meaningful to participants.

However, it warns that the cost of increasing the number and size of Esops may be in conflict with expansion of the role of employees in management because many firms might be reluctant to share control with employees, and employees may not have control as a goal. Finally, the GAO says that it is still studying the relationship between the presence of an Esop and the productivity and profitability of a firm. It will issue a separate report on this issue which could go a long way towards resolving the question of whether Esops are little more than a gigantic tax fiddle which makes very little fish or whether they are a key financing tool for "democratising capitalism," as Mr Kelso argues.

William Hall



Chancellor Nigel Lawson's proposals hold out the prospect of significant tax savings

Budget effects

New dimension to tax relief

ONE OF THE most significant issues for every employee-owned company will be how best to distribute profits to its employees/shareholders.

Dividends and salary bonuses are the two obvious alternatives but last month's Budget has added an intriguing new element by introducing tax relief for profit-related pay.

In a company owned by outside shareholders there will be a clear cut distinction between labour costs and profits.

However, where employees and shareholders are the same people, a much more flexible reward system can be devised.

Workers/shareholders should be equally happy with a pay cheque or a dividend cheque of the same amount assuming both are equally tax effective.

The only reservation is that it may not always be possible to arrange matters so that each individual receives the same benefit from a dividend as from a bonus, particularly where the distribution of shares in the company is somewhat uneven.

Before considering dividends, a significant advantage of dividends is the absence of NICs. The liability to National Insurance Contributions (NICs) is offset against the liability resulting from receipt of the dividend. Suppose, for example, that Mr A is paid a dividend of £73 on which the company pays ACT of £27. Mr A is treated as having received £100 of income (dividend plus ACT) on which he is credited with having paid tax of £27. Hence, if he is a basic rate taxpayer he will have no further liability.

The important advantage of paying extra salary is that it will be tax-deductible whereas dividends are paid out of after-tax profits. The Budget kept the rate of corporation tax for large companies at 35 per cent while

Type of Payment	Amount	Employee's NICs	Income Tax	Net Amount
Dividends	£1,000	—	270	730
Ordinary Pay	£1,000	80	270	640

* inclusive of ACT

taxpayer earning no more than £14,340 per annum.

It will be noted that although the dividend route is more effective than ordinary remuneration, profit-related pay gives the best return of all. The NIC saving on dividends is more than outweighed by the hefty income tax reduction on PRP.

Another profit-linked scheme which merits serious consideration by employee-owned companies is the profit-sharing scheme under the Finance Act 1978.

Apart from non-deductibility, the other potentially adverse consequence to the company of the payment of dividends will be a liability to advance corporation tax (ACT). For dividends paid below ACT is payable at a rate of 27/22nds (31.86 per cent) of the amount of the dividend. ACT can, however, be offset against a company's liability to mainstream corporation tax so that provided a company has sufficient taxable profits to absorb the full amount of ACT paid, it will suffer a cash flow disadvantage, but no other cost.

The positive aspect of ACT is that it gives the shareholder a tax credit which can be offset against the liability resulting from receipt of the dividend. Suppose, for example, that Mr A is paid a dividend of £73 on which the company pays ACT of £27.

Mr A is treated as having received £100 of income (dividend plus ACT) on which he is credited with having paid tax of £27. Hence, if he is a basic rate taxpayer he will have no further liability.

If Mr A were given extra remuneration of £100 instead of a dividend he would also be left

with £23 after payment of basic rate tax.

The Chancellor has now added a new factor to this finely-balanced equation. For companies with profit-related pay (PRP) will have precisely the same tax consequences as ordinary pay. And there will be no concession on NICs for either employees or employees.

Indeed, if the profit-related pay is not subject to NICs then the new tax relief will not be available. But for employees, the Chancellor's proposals hold out the prospect of significant tax savings.

The term "profit-related pay" is more or less self-explanatory. Under a PRP scheme a part of employees' pay will move up and down in line with the company's profits.

Half of the PRP will be free of income tax up to the point where PRP is 20 per cent of total salary or £2,000 a year, whichever is the lower.

PRP seems tailor-made for employee-owned companies.

The table compares the net benefit which an employee will obtain from £1,000 of the company's post-tax profits, depending upon whether it is received as ordinary pay, profit related pay or dividend. It is assumed that the employee is a basic rate

taxpayer.

Moreover, employees will pay no income tax on the shares provided they hold on to them for at least five years. If employees are given new shares in proportion to their existing holdings then nothing at all will change and the only tangible result will be the corporate tax saving.

Alternatively, employees may appreciate being given a choice between shares and cash. This might possibly be achieved by operating a profit-sharing scheme in tandem with a profit-related pay scheme.

David Cohen

David Cohen is a solicitor and a partner in Palmer & Co of London, EC4.

Lawyers

Clifford-Turner's Employee Share Scheme Unit is expanding. The recently announced merger between Coward Chance and Clifford-Turner will lead to still more opportunities in this area.

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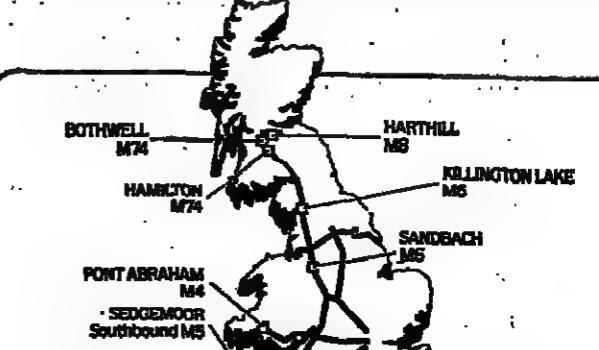
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EMPLOYEE OWNERSHIP 5



A rotating biological contractor for a regional water authority built by Tuke & Bell, a Lichfield engineering company taken over by its employees who include Mr P. E. Sankey, financial director (left) and Mr K. Sanderson, managing director.

Case study: Tuke & Bell Ironing out the divisions

TUKE & BELL in common with most engineering companies had to shed staff during the years of recession.

Its present 50-strong workforce is only about half the size it used to be. But the surviving employees, most of whom have long service, have received an unusual reward for their loyalty—ownership of the company.

In what is still an unusual experience for a private company in Britain, Tuke & Bell, based at Lichfield, Staffordshire, has been taken over 100 per cent by its employees through a profit-sharing scheme under the 1976 Finance Act.

Tuke & Bell was established in 1912. Its turnover last year was £1.6m, and will be around £2m this year. The management's decision to introduce full employee ownership was based upon a combination of philosophical and practical considerations.

"When we look back over the last 100 years we see a history of divisions between capital and labour," said Mr Philip Stacey, managing director. "I believe the next 100 years will see the capital and labour coming much closer together. We wanted to make a contribution to that process in our own company."

In more immediate terms, Mr

Sankey admits that an employee ownership structure protects Tuke & Bell—a specialist engineering company which designs, manufactures and installs sewerage treatment equipment—from the risk of collapse.

Work on the plan to convert Tuke & Bell to an employee ownership structure began two or three years ago. At that stage the company had about 20 shareholders. Some were distant relatives of the founders.

"About half the 20 did not know where the company was located," said Mr Sankey. "They simply relied on it to provide a little income."

Last year the shareholders were offered double the ordinary value to sell their shares to a newly created trust. Most agreed immediately, and a few doubters were eventually persuaded to accept.

When the directors of Tuke & Bell decided to try to organise an employee take-over they sought advice from City solicitors Parkinson & Co on how this could best be achieved.

Parkinson & Co recommended the use of a revenue-approved profit-sharing scheme under the 1976 Finance Act.

Adopting this advice, the takeover proceeded by the following stages:

MANY WORKERS

co-operatives come to life in an atmosphere of panic as the single, desperate hope of preventing plant closures and redundancies.

Barnsley Metal Finishing is one such example. In a few hectic weeks during 1984 Barnsley Electro Plating, a Rainie Industries subsidiary facing closure, was transformed under the new title as a democratically-run enterprise.

Now Barnsley Council, which assisted in the rescue, has published a booklet telling the story of Barnsley Metal Finishing. The booklet describes it as in many respects an unremarkable story, "which makes it all the more important as an example to other workgroups who find themselves in similar situations and to trade unions and local authorities committed to combating unemployment in practical terms".

The workers at Barnsley Electro Plating, some of whom had been with the company for more than 30 years, returned from their annual holidays in August, 1984, to receive their redundancy notices.

Case study: Barnsley Metal Finishing

Bosses on the shopfloor

At first it seemed possible that a buyer for the company might be found. The workers describe themselves as spending several weeks on the sideline, hoping and praying that someone would come to their rescue. But a new buyer did not appear, and an attempted management buyout by two managers also failed.

As hopes began to fade, the co-operative alternative gained strength as a possibility, and a majority of the workforce was called to gauge support for the idea.

"For many this was the first time they had heard of workers' co-operatives," says the booklet. "There was a lot of uncertainty but two overriding factors stood out. One was the shared belief that the business was viable and that the closure was

due to management neglect rather than the poor quality of their own workmanship.

"Secondly, as a workforce they knew each other and were concerned for each other's welfare. They decided to give it a go."

Rainie Industries agreed to delay the closure a little, giving the workers three weeks to put the proposed new structure together. The Department of Employment agreed that provided there was at least one day's break between the old company closing and the new one starting, redundancy payments could be made in the normal way.

One of the first painful decisions which had to be faced was the need to reduce the workforce from 21 to 15 to provide any chance of viability. The 15

were selected at a meeting which also agreed to narrow wage differentials in the new business.

Differentials between the highest and lowest paid were reduced from more than 3-1 to less than 2-1. Local authority financial support enabled the workers to obtain matching bank finance and the co-operative was born.

Initially four sub-committees—Finance, Sales, People and Production—were set up to report to a weekly general meeting of the co-operative.

"One of the biggest dangers facing any co-operative that has converted from being a conventional business is that the changes in the way the business is managed," says the booklet. "Even worse is the danger that workers will find themselves with all the responsibilities of managers but none of the powers or skills to control their business."

An outside training specialist

was brought in to help tackle these problems and draw up a suitable management structure.

Employees were interviewed individually about the changes which were taking place and then attended a residential weekend—the first of three—to work out the objectives of the co-operative.

Initially four sub-committees—Finance, Sales, People and Production—were set up to report to a weekly general meeting of the co-operative.

"The production and administration managers of the old company were retained, except that they now report to the executive committee. But the managers lost their responsibility for disciplinary and grie-

vance matters to a disputes panel of the co-operative. It was also decided to abolish supervisors.

Attitudes have, suggests the booklet, begun to change at Barnsley Metal Finishing. It says that workers are more willing to help each other out, and are learning more about the technical aspects of their jobs.

It concludes by quoting an employee who had been with the company only four months when it became a co-operative: "I was unemployed for over two years before I got this job here. That period made me think a lot about work. Recently I was offered my old job back at the company I used to work for. It's much nearer home and the pay was 50 per cent more. I turned it down. I'm not sure I can really explain why. Somehow it would never be the same again working for someone else. Here we are all our own bosses."

Alan Pike

#Barnsley Metal Finishing: From Closure to Co-operation, Barnsley Borough Council; 60p.

Guide to advice on co-operatives

WORKERS' co-operatives are a rare phenomenon, basing in approval of all political parties in the present industrial climate.

The Trustees entered into negotiations with the shareholders of the company to purchase a piece of which the Trustees would purchase 100 per cent of the shares.

3. The company provided the Trustees with sufficient funds to make the purchase.

4. The purchase was completed and the Trustees became sole owner of the company.

The following are some of the organisations offering advice to would be co-operatives:

The Co-operative Development Agency, with national headquarters at Broadmead House, 21, Pantos Street, London SW1Y 4DR, was set up by the Labour Government in 1978 with all-party support.

The agency will be dedicated to the profits for co-operatives for tax purposes.

5. The employees will not be taxed on the benefit of receiving the shares provided that the shares are not sold—and continue to be registered in the names of the Trustees—for at least five years.

Alon Pike

operatives in the country is nearing 1,500.

One area identified as a problem area, on which the CDA has been concentrating efforts, is marketing. Finance, too, is a frequent problem and the CDA has devised the structure of an equity participation plan to acquire access to risk capital.

The chairman of the CDA is Mr Ralph Woolf, who is managing director of Scott Bader, a medium-sized common-owner ship company in the chemicals and plastics industry. Chief Executive is ex-Unilever executive Mr George Jones. The CDA produces an informative quarterly magazine that keeps members up-to-date with details of the help available and of government decisions affecting the movement.

One particularly interesting recent launch, reported in the Co-op Developer magazine and under the aegis and support of the CDA, was of the Independent Designers Society, which has set itself up in premises in Camden, north London.

Seventy young furniture and educational support and training, covering the whole of the UK including Northern Ireland. It represents and promotes the interests of co-operatives to central and local government and other organisations and to the hub of a vigorous export drive. A largely DIY effort by

these decor professionals produced a handsome showroom assembly, appropriately enough in a thoroughfare called Bruges Place.

The Industrial Common Ownership Movement, which has offices at 74 Corn Exchange, London EC2P 7BP, is ready to help co-operatives to operate and is funded by their subscription.

The exchange, an interesting piece of architecture, still holds a weekly corn market, but is expected to close in a few months for redevelopment. Last year the organisation registered 200 co-operatives, having had 450 on its books at the end of 1986.

Whilst it could be said to overlap with the officially-backed ICOM in the field of advice and support, it is rather more of a pressure group, with its Labour Party links and an ongoing dialogue with the Liberal Party. In partnership with the Greater London Enterprise Board it launched a successful pilot scheme for management training for larger co-ops in London.

Yorkslink, by tradition and environment, is a fertile breeding ground for co-operation and support, with its Labour Party links and an ongoing dialogue with the Liberal Party. In partnership with the Greater London Enterprise Board it launched a successful pilot scheme for management training for larger co-ops in London. ICOM has put forward proposals for training and liaison with its legal, working party and introduced information systems and through data-base projects and has put out a strong list of publications.

Among other interesting areas of activity where groups

devoted to employee-control, recognising their weaknesses in such areas as marketing, in buy in outside expertise.

SYBS manager is Mr Andrew Mason, who has experience as an engineer, computer programmer, product manager, market researcher and consultant. He heads a team with a wide range of expertise. Among their recent help projects has been Mons Precision Services (the old name, Snow, turned upside-down). It specialises in the refurbishment of grinding machinery, but is developing a new domestic dehumidifier in co-operation with Sheffield Polytechnic, and was much in need of help with marketing and strategy.

With support from such organisations as these, plus major initiatives from local authorities, there is a powerful back-up for aspirant and existing workers' co-operatives.

James French

Partnership on the scale of modern industry

The John Lewis Partnership

The Partnership is a retail business run on co-operative principles. In 1986/7 sales were £1,563 million and the net assets employed were £401 million.

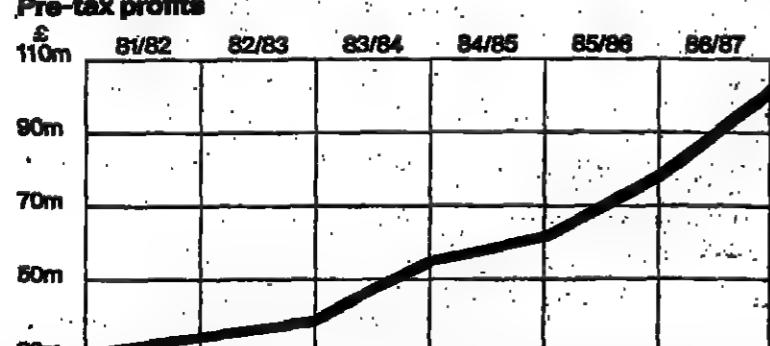
Comparative sales figures

	John Lewis department stores £m	National non-food retailers Index 1982=100
1982/3	500.1	100
1983/4	572.4	114
1984/5	638.1	128
1985/6	718.5	144
1986/7	822.6	164

	Waitrose food stores £m	National food retailers Index 1982=100
1982/3	411.6	100
1983/4	487.6	118
1984/5	553.7	135
1985/6	634.1	154
1986/7	725.8	176

The business belongs to those who work in it. All except those engaged temporarily are Partners from the day they join, and all the ordinary share capital is held by trustees on their behalf.

Pre-tax profits



Under irrevocable trusts Partners get all the profits, after provision for prudent reserves and for interest on loans and fixed dividends on preference stocks. Distribution is made direct in the form of Partnership Bonus, shared among Partners at the end of the trading year as a percentage of their pay; in March 1987 this amounted to £42 million and the rate of distribution was 24 per cent of each Partner's pay. Bonus payments are made in addition to market rate pay.

Total cash bonus in £ million

81/82	82/83	83/84	84/85	85/86	86/87
15.7	17.1	25.4	25.7	30.6	42.2

Partnership Bonus, paid as a percentage of market rate pay, has varied between 16% and 24% since 1982, the average being 19%.

The principal authorities in the Partnership under its written constitution are the Chairman; the Central Council, representing all Partners; and the Central Board (the Board of John Lewis Partnership pic), five of whose twelve directors are elected by the Central Council.

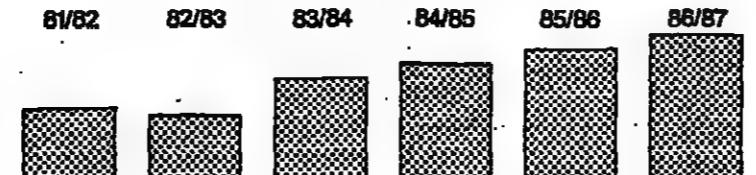


The Chairman, Mr Peter Lewis

The Partnership aims to run its business efficiently and competitively, and at the same time to enable its members to enjoy full information about it, to express their views freely, to co-operate in shaping its policies, and to share in its rewards. Management is accountable to the general body of Partners, in particular through elected Councils and through the Partnership's journalism.

Net assets employed

81/82	82/83	83/84	84/85	85/86	86/87
£266.7m	£284.1m	£308.7m	£333.8m	£363.1m	£401.0m



This advertisement is issued in compliance with the requirements of the Council of The Stock Exchange.

Application has been made to the Council of The Stock Exchange for the grant of permission to deal in the issued share capital of Rockwood Holdings Plc in the Unlisted Securities Market. It is emphasized that no application has been made for these securities to be admitted to Listing.

ROCKWOOD HOLDINGS PLC

(incorporated in England under the Companies Act 1948 as 1921 Registered No. 202204)

SHARE CAPITAL	
Authorised	Issued
£1,525,000	£1,021,889

In Ordinary Shares of 10p each

Business

Rockwood's two principal activities at present are the distribution of electronic components and the provision of specialist security services. Subject to shareholders' approval on 16th April, 1987 Rockwood will be acquiring Bonds, a specialist distribution group operating mainly in the tobacco industry, from Hanson Trust PLC.

Full particulars of the Company are available through the Excel Unlisted Securities Market Service. Copies of Excel Cards can be obtained during normal business hours on any weekday (excluding Saturdays and public holidays) up to and including 5th May, 1987 from:

Lloyd's Merchant Bank United Clear Bluebell Securities
404 Queen Victoria Street, 2223 Burlington Street,
London EC2P 4EL. London H2C 1EP

and The Stock Exchange

13th April, 1987

FINANCIAL TIMES SURVEY

The Financial Times proposes to publish a

BUSINESS TRAVEL SURVEY

on 7 May 1987

The following subjects will be covered:

1. Controlling the costs
2. Airlines and the Business Traveller
3. Air Charter
4. Domestic Flights—How to pay less
5. Hotels
6. Car Rental
7. Rail Travel
8. The International Business Traveller
9. The UK Business Traveller
10. Taking Money Abroad
11. Incentive Travel
12. Conferences and Exhibitions
13. Women Travellers
14. Business
15. Travelling Gadgets

All editorial comment should be addressed to the

Surveys Editor.

A full editorial synopsis and information about advertising can be obtained from:

Tim Kingham

telephone 01-246 2000 ext 2800,

or your usual Financial Representative.

The content, size and publication dates of Surveys in the Financial Times are subject to change at the discretion of the editor.

15th MAY 1987 REDEMPTION

GESTETNER HOLDING B.V.

£10,000,000 11% STERLING FOREIGN CURRENCY BONDS 1988

REDEMPTION OF BONDS

Gestetner Holding B.V. announces that for the redemption period ending on 15th May 1987 it has purchased and cancelled bonds of the above Loan for £395,000 nominal capital and tendered them to the Trustee.

The nominal amount of bonds to be drawn for redemption at par on 15th May 1987 to satisfy the Company's current redemption obligation is accordingly £105,000 and the nominal amount of this Loan remaining outstanding after 15th May 1987 will be £5,983,000.

Notice is accordingly hereby given that a drawing of bonds of the above Loan took place on 3rd April 1987 attended by Mr. William Brignell Member of the firm of John Venn & Sons, Notary Public, when £105,000 nominal capital were drawn for redemption at par on 15th May 1987, from which date all interest thereon will cease.

The following are the numbers of the bonds drawn:

16	75	235	373	498	807	883	915	921	1299	1303	1311	1371	1538	1606	1736	1795	1776	1998	2041
2404	2493	2497	2571	2866	2971	3245	3334	3387	3614	3660	3689	5049	5105	5353	5394	5396	5415	5422	5774
5812	5896	5958	6029	6033	6234	6386	6618	6731	6791	6798	6925	6936	6973	7039	7083	7093	7102	7155	
7525	7543	7712	7729	7873	7883	7956	7978	8010	8077	8102	8133	8136	8336	8347	8390	8452	8484	8510	8550
8588	8677	8712	8878	8932	8968	8972	9066	9090	9155	9243	9279	9404	9447	9465	9512	9579	9718	9727	
9816	9822	9847	9905	9986															

Witness: W. B. Karsik, Notary Public.

The above bonds may be presented for payment of the proceeds of redemption at par or on or after 15th May 1987 at the offices of the paying agent named on the bonds in the manner specified in Condition 6 of the Terms and Conditions of the Loan printed on the reverse of the bonds. Each of these bonds when presented for redemption must bear the coupon dated 15th May 1986, and subsequent coupon, otherwise the amount of the missing coupons will be deducted from the principal to be repaid.

Bondholders electing to receive payment in U.S. Dollars must give irrevocable written notice to any Paying Agent named on the reverse of the bond on or before 30th April on the appropriate form available from a Paying Agent.

Principal Paying Agent: N M Rothschild & Sons Limited New Court St. Swithin's Lane London EC4P 4DU

15th April 1987

BANCA COMMERCIALE ITALIANA

Joint Stock Company - Head Office in Milan, Italy
Capitaletto 1, 20134 Milan, Italy
Telephone 02/76000000 - Telex 340000/BANCA ITALIA

The Stockholders of Banca Commerciale Italiana are called to an Ordinary General Meeting to be held at Piazza Belgioioso 1, Milan, Italy, at 10 a.m. on 28th April 1987, and if necessary for the second time of convening on 29th April 1987, at the same time and place, to resolve the following

Agenda

- 1) Report of Board of Directors
- 2) Report of Board of Auditors
- 3) Submission of Balance Sheet at 31st December 1986 and resolutions arising therefrom
- 4) Appointment of Board of Directors

Holders of shares bearing the right to vote are entitled to take part in the General Meeting provided that they, even if already registered in the Share Register, have deposited their shares with the Bank or with Monte Titoli at least five days before the date of the General Meeting, in accordance with the provisions of Art. 4 of Law No. 1745 of 29th December 1962.

The Chairman
of the Board of Directors

INTERNATIONAL COLLABORATION IN AEROSPACE

- Problems, Progress & Prospects

Paris
9 & 10 June, 1987

For information please return this advertisement, together with your business card, to:



Financial Times
Conference Organisation
Minster House, Arthur Street, London EC4R 9AX.
Aldermanbury,
telephone 01-621 1355 telex: 27347 FTCONF G.
fax: 01-623 8814

APPOINTMENTS

Scottish head for Lloyds Bank

Mr Nigel Whitley is the new chief manager of Scotland for LLOYD'S BANK in succession to Mr Louis Dean who is retiring. Mr Whitley began his career in industry with Courtaulds and then moved to the Bank of Montreal. He joined Lloyds Mortgag Bank in 1978 and worked in capital markets, and then project and export finance. Since November 1983 he has been based at the bank's head office in the corporate banking division. *

THE ABERDEEN EXHIBITION AND CONFERENCE CENTRE has appointed Mr David Judd as marketing director. He was general manager and chief executive officer of the Edmonton Convention and Tourism Authority, Canada. *

MR ALICE R. FAYER has been appointed to the board of SMITH & NEPHEW ASSOCIATED COMPANIES. He is currently managing director of the Smith & Nephew UK consumer division. *

MR J. M. COWIE has been appointed as company secretary and group financial controller. He was finance director with British Hill Aviation as managing director. *

MR GARY BURGESS has been appointed managing director of WEIR DRILLING. He was a director and general manager. Mr Angus Grant has been named a director, technical services. *

MR PETER E. GOODMAN has appointed two new associate directors, Mr Peter Milne and Mr Max Goodman. *

JOINING QUADREX SECURITIES is Mr David Prior, commercial director of British Steel Corporation and chairman of British Steel Services Centres. *

CONTRACTS

£30m treatment plant for Sizewell 'B'

DAVID McKEE NUCLEAR, Stockton-on-Tees, nuclear engineering arm of Derry Corporation, has been appointed by the Central Electricity Generating Board to design, supply and construct the treatment plant for radioactive waste at the Sizewell "B" nuclear power station recently given the go-ahead by the Secretary of State for Energy, Mr Peter Walker. *

The contract for the radioactive waste plant awarded by the CEBG over £30m, is due for completion by the end of 1992. The 110MW capacity power station will be the first pressurized water reactor type to be built in the UK. *

The Sizewell "B" radioactive waste plant will treat various solid, liquid and gaseous streams arising from the operation of the power station. The radioactive components of these streams will be segregated prior to encapsulation in a neutral medium in preparation for final disposal at authorised sites. *

AMPEX CORP has won international orders for television broadcast equipment worth more than US\$3.5m. The first quarter of 1987. The orders include a 1000-channel television system for a production studio and editing suite for Superchannel, a new European television network. The contract for the Sizewell plant awarded by the CEBG over £30m, is due for completion by the end of 1992. The 110MW capacity power station will be the first pressurized water reactor type to be built in the UK. *

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The Virgin Group of London has

WORLD MARKETS

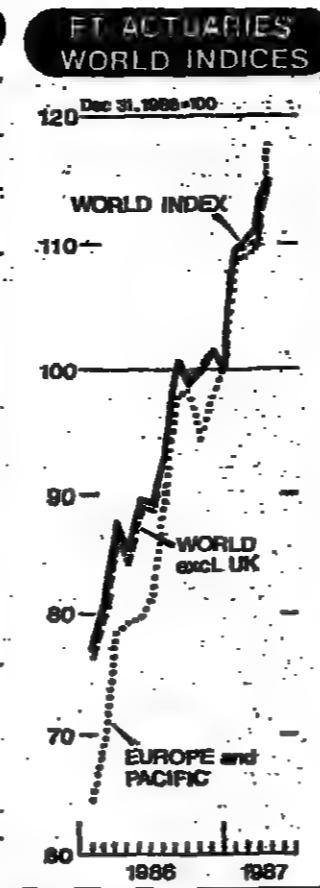
FT-ACTUARIES WORLD INDICES

Jointly compiled by the Financial Times, Goldman, Sachs & Co., and Wood Mackenzie & Co. Ltd., in conjunction with the Institute of Actuaries and the Faculty of Actuaries

NATIONAL AND REGIONAL MARKETS	FRIDAY APRIL 10 1987			
	US Dollar Index	Day's Change %	Pound Sterling Index	Local Currency Index
Figures in parentheses show number of stocks per grouping				
Australia (94)	132.17	+1.0	120.46	122.43
Austria (165)	95.83	+0.8	85.53	88.20
Belgium (47)	120.20	+1.1	109.56	111.60
Canada (131)	134.40	-0.1	122.51	126.76
Denmark (99)	113.73	+0.2	103.67	105.53
France (122)	118.78	+0.3	108.27	111.97
West Germany (90)	93.43	-1.5	85.17	87.70
Hong Kong (45)	109.81	+0.1	100.09	109.98
Ireland (14)	139.73	-0.9	109.14	114.18
Italy (76)	104.90	+1.8	95.53	100.65
Japan (458)	146.42	+4.4	133.46	131.84
Malaysia (36)	141.11	+1.0	128.62	134.78
Mexico (14)	155.25	+2.8	141.51	153.59
Netherlands (38)	116.55	-1.0	106.24	108.33
New Zealand (27)	96.20	-0.2	87.68	88.75
Norway (25)	131.52	+0.5	119.88	121.21
Singapore (27)	121.56	+0.0	110.61	119.68
South Africa (61)	182.85	+8.1	166.67	177.57
Spain (43)	112.87	+3.4	102.88	108.72
Sweden (33)	116.28	-0.8	105.99	108.67
Switzerland (51)	98.77	-0.1	90.03	91.55
United Kingdom (342)	127.68	-0.5	116.38	116.38
USA (598)	119.96	-0.2	109.35	119.96
Europe (936)	114.01	-0.3	103.93	105.74
Pacific Basin (687)	144.46	+4.2	131.57	130.62
Euro-Pacific (1623)	132.31	+2.6	120.50	120.70
North America (729)	120.72	-0.2	110.04	120.35
World Ex. US (1829)	132.94	+2.6	121.16	120.98
World Ex. UK (2085)	127.90	+1.8	116.58	121.21
World Ex. So. Af. (2366)	127.52	+1.5	116.24	120.74
World Ex. Japan (1969)	119.06	-0.1	108.53	115.20
The World Index (2427)	127.87	+1.5	116.56	120.75

Base values: Dec 31, 1986 = 100
Copyright, The Financial Times, Goldman, Sachs & Co., Wood Mackenzie & Co. Ltd. 1987
Latest values not available

Last page not an



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LONDON SHARE SERVICE

INSURANCES—Continued

Dividends	Paid	Stock	Price	Last	Net	CWY	YTD	%	P/E
Jan	Feb	Jel-Puvs Holdings 10p	312	32	29.9	4.2	11.7	1.7	
May	May Pearl Group 50	355	32	30.5	3.3	12.5	1.7	1.1	
Nov	Nov. Morrisons 50	468	23.3	15.7	1.1	1.1	1.1	1.1	
Jan	May Postal 50	937	23.3	11.8	4.7	1.1	1.1	1.1	
Apr	Oct. Sedgwick Group 10p	365	8.2	42.8	1.7	5.1	1.1	1.1	
May	May Postal 50	365	8.2	42.8	1.7	5.1	1.1	1.1	
Nov	Nov. Stewarts 20p	498	11.9	11.0	2.1	2.1	2.1	2.1	
Jan	South Georgia Holdings 25p	397	26.1	19.5	2.1	2.1	2.1	2.1	
Jan	July South Africa 10p	210	1.1	1.1	1.1	1.1	1.1	1.1	
April	July South Africa 10p	210	1.1	1.1	1.1	1.1	1.1	1.1	
Feb	Feb. My Workforce 5.10	253	2.3	1.1	0.8	0.8	0.8	0.8	
Mar	My Workforce 5.10	253	2.3	1.1	0.8	0.8	0.8	0.8	
Dec	Dec. Trade Finance 5.10	253	2.3	1.1	0.8	0.8	0.8	0.8	
Jan	Amex U.S.LIFE Corp. 51.0	595	51.0	51.0	3.1	3.1	10.2	1.1	
May	May Workforce 5.10	595	51.0	51.0	3.1	3.1	10.2	1.1	
May	May Workforce 5.10	595	51.0	51.0	3.1	3.1	10.2	1.1	
Jul	July Workforce 5.10	595	51.0	51.0	3.1	3.1	10.2	1.1	

LEISURE

October	July & A-TV Prod. 11p	241	11.8	1.6	0.4	2.0	1.8	1.8	
Sept	Aug. Angels TV 11p	76	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Reagan's Cines. 10p	485	1.1	1.1	1.1	1.1	1.1	1.1	
July	HBO 10p	485	1.1	1.1	1.1	1.1	1.1	1.1	
Nov	Bally & W.A.T. 11p	149	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	October T.V. 11p	175	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Dec. Bruce Water 10p	377	11.1	1.1	1.1	1.1	1.1	1.1	
Nov	Nov. Bruce Water 10p	377	11.1	1.1	1.1	1.1	1.1	1.1	
Dec	Dec. Bruce Water 10p	377	11.1	1.1	1.1	1.1	1.1	1.1	
Jan	Capital Radio 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Nov	Nov. Capital Radio 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Dec	Dec. Capital Radio 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	July Capital Radio 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Capital Radio 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
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Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
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Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
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Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
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Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
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Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Oct	Oct. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.1	
Jan	Jan. Leisure 10p	105	1.1	1.1	1.1	1.1	1.1	1.	

WORLD STOCK MARKETS

AUSTRIA

1987 High	Low	April 10 Price Per Unit	1987 High	Low	April 10 Price Per Unit						
2,110	2,020	Creditanstalt	2950	280	AEG-Teck	305	4	ACI Int.	3,85	3,65	3,65
2,120	2,250	Erste	2950	280	Adalste Steams...	3,85	2,95	All Nippon Air.	3,85	3,85	3,85
23,200	12,750	Internationale	32,000	3,05	AKS	3,15	2,95	Alusuisse	3,15	3,15	3,15
24,000	8,000	Jungbusch	320	275	Alusuisse	3,15	2,95	Alusuisse	3,15	3,15	3,15
712	400	KfW	320	275	Bayer	3,10	2,95	AN2 Group	3,70	3,65	3,65
167	140	Peripher	320	275	Bayer-Verein	3,25	2,95	Angestell Pet.	3,05	3,05	3,05
11,334	750	Vestische Mag.	320	275	Bayer-Verein	3,25	2,95	Angestell Pet.	3,05	3,05	3,05

GERMANY

1987 High	Low	April 10 Price Per Unit	1987 High	Low	April 10 Price Per Unit						
2,110	2,250	Creditanstalt	2950	280	AEG-Teck	305	4	ACI Int.	3,85	3,65	3,65
23,200	12,750	Erste	32,000	3,05	AKS	3,15	2,95	Alusuisse	3,15	3,15	3,15
24,000	8,000	Internationale	320	275	Bayer	3,10	2,95	AN2 Group	3,70	3,65	3,65
712	400	KfW	320	275	Bayer-Verein	3,25	2,95	Angestell Pet.	3,05	3,05	3,05
167	140	Peripher	320	275	Bayer-Verein	3,25	2,95	Angestell Pet.	3,05	3,05	3,05
11,334	750	Vestische Mag.	320	275	Bayer-Verein	3,25	2,95	Angestell Pet.	3,05	3,05	3,05

AUSTRALIA

1987 High	Low	April 10 Price Per Unit	1987 High	Low	April 10 Price Per Unit
4	2,55	ACI Int.	3,85	3,65	3,65
5,100	4,75	Adalste Steams...	3,85	3,65	3,65
5,210	4,75	Alusuisse	3,15	3,15	3,15
24,000	8,000	AN2 Group	3,70	3,65	3,65
712	400	Angestell Pet.	3,05	3,05	3,05
167	140	Brother Inds.	3,65	3,65	3,65
11,334	750	Cash Corp.	3,65	3,65	3,65

JAPAN

1987 High	Low	April 10 Price Per Unit	1987 High	Low	April 10 Price Per Unit
4	2,55	ACI Int.	3,85	3,65	3,65
5,100	4,75	Adalste Steams...	3,85	3,65	3,65
5,210	4,75	Alusuisse	3,15	3,15	3,15
24,000	8,000	AN2 Group	3,70	3,65	3,65
712	400	Angestell Pet.	3,05	3,05	3,05
167	140	Brother Inds.	3,65	3,65	3,65
11,334	750	Cash Corp.	3,65	3,65	3,65

CANADA

Sales Stock	High	Low	Close	Change	Sales Stock	High	Low	Close	Change	Sales Stock	High	Low	Close	Change			
8014	AMCA Int.	\$71	\$65	\$65	8014	Globe Comp.	\$65	\$65	\$65	-1	1205	Globe Comp.	\$65	\$65	\$65	+1	
17,315	CP Ltd.	\$245	\$245	\$245	-	1802	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
84,037	CTI Int'l.	\$155	\$155	\$155	-	1803	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
20,000	Concord	\$245	\$245	\$245	-	1706	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
22,040	Concord	\$245	\$245	\$245	-	1707	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
33,257	Concord	\$245	\$245	\$245	-	1708	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
77,785	Alberta B.	\$175	\$175	\$175	-	1709	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1710	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1711	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1712	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1713	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1714	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1715	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1716	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1717	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1718	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1719	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1720	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1721	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1722	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1723	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1724	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1725	Globe Y.	\$225	\$225	\$225	-	1705	Globe Y.	\$225	\$225	\$225	+1
17,070	Carib Okt.	\$175	\$175	\$175	-	1726	Globe Y.	\$225	\$225	\$225	-	1705</td					

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

Closing prices, April 10

Continued on Page 45

NYSE COMPOSITE CLOSING PRICES

Continued from Page 44

These figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest closing day. Where a split or stock dividend amounting to 25 cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual distributions based on latest declaration.

d-dividend also **extra(d)**, b-annual rate of dividend plus stock dividend, c-equidividend dividend, d-new yearly dividend declared or paid in preceding 12 months, g-dividend in Canadian funds, subject to 15% non-residence tax, h-dividend declared after split-up or stock dividend, i-dividend this year, omitted, deferred, or no action taken at latest annual meeting, k-dividend declared or paid this year, on accumulative basis with dividends in arrears, l-new issue in the last 82 weeks. The high-low range begins with the start of the trading, nd-next day delivery, P/E-price-earnings ratio, r-dividend declared or paid in preceding 12 months, plus stock dividend, s-stock split. Dividends begin with date of declaration, t-dividend paid in stock in preceding 12 months, u-dividend cash value based on ex-dividend or ex-distribution date, v-yearly high, v-trading halved, w-in bankruptcy or receivership or being reorganized under the Bankruptcy Act, or subsequently assumed by such companies, x-widistributed, y-without warrant, x-with warrant, x-ex-dividend or ex-rights, x-ex-distribution, x-without warrant, y-ex-dividend and sales in dividends, z-series in full.

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THE
NETHERLANDS

AMEX COMPOSITE CLOSING PRICES

**Closing prices
April 10**

OVER-THE-COUNTER Nasdaq

Nasdaq national market, closing prices, April 16

Continued on Page 43

CURRENCIES, MONEY & CAPITAL MARKETS

FOREIGN EXCHANGES

BY COLIN MILLMAN

FINANCIAL MARKETS are showing signs of increasing nervousness about world trade disputes between the old industrialised West and the growing powers of the Far East.

The obvious focus is on the US row with Japan over alleged dumping of semiconductors, and over US and British demands for greater access to Japanese markets.

US sanctions aimed at stemming the flow of imports from Japan will also lead to fears that Japan will seek a larger market share in Europe, increasing tension with the Common Market.

The published figures suggest that Japan is likely to be on a collision course with the West. According to a survey by Money Market Services tomorrow's

figure on February US trade will show a deficit of \$13bn, which is little different from the January, shortfall of \$14.8bn.

In March Japan's trade surplus rose to \$6.09bn, from \$7.14bn in February, but the surplus with the US fell to \$3.78bn from \$3.97bn, indicating that Japan's sales drive may be looking towards Europe, to avoid even more friction with the US.

For the financial year ending on March 31 Japan's trade surplus was a record \$38.77bn, compared with \$33.60bn the previous year, while imports were also a record.

This rise of 70 per cent in the Japanese surplus was partly offset by the weakness of the dollar, but not by very much.

During the year the dollar fell by about 20 per cent against the yen.

James Capel adds, the underlying appreciation towards a lower trade surplus is something that appears to be poorly understood by Western politicians. Stability of the yen against the dollar has become the primary objective of Japanese economic policy, according to Capel, but action taken so

far is unlikely to prevent a further appreciation of the yen. The rising tide of protectionism may stop the process, but at the expense of a sharp slowdown in world recession.

Lloyd Bank's analysis of the international financial outlook sees the expansion of other economies in the Far East as an important factor in the rising tension in world trade.

Low labour costs and an

exchange rate regime aimed at sustaining exporting competitiveness has ensured that countries such as South Korea, Taiwan, and Hong Kong were positioned to take advantage of the two most significant changes in the world economy last year: lower oil prices and the fall of the dollar.

The bank says that the outlook for 1987 suggests a worsening of the problems, as a result of the aggressive export drive from Asia.

It is heartening to note that the US and Britain are not alone in challenging Japanese trading practices. France has decided all Japanese microwave ovens must receive a control certificate from a recognised European laboratory, in retaliation at the hold up of French shampoo exports by Japanese quality controls.

Who Owns What in World Banking provides an indispensable guide through the complex structures of the subsidiary and affiliated banking interests of over 250 of the world's largest banks – including multinationals and consortia.

Financial Times Monday April 13 1987



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